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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

UNICORN ENERGY AG,

Plaintiff,

v.

TESLA INC..

Defendant.

Case No. 21-cv-07476-BLF

ORDER GRANTING IN PART AND NYING IN PART PLAINTIFF'S MOTION FOR SUMMARY JUDGMENT: GRANTING IN PART D DENYING IN PART **DEFENDANT'S MOTION FOR** SUMMARY JUDGMENT

[Re: ECF Nos. 373, 377]

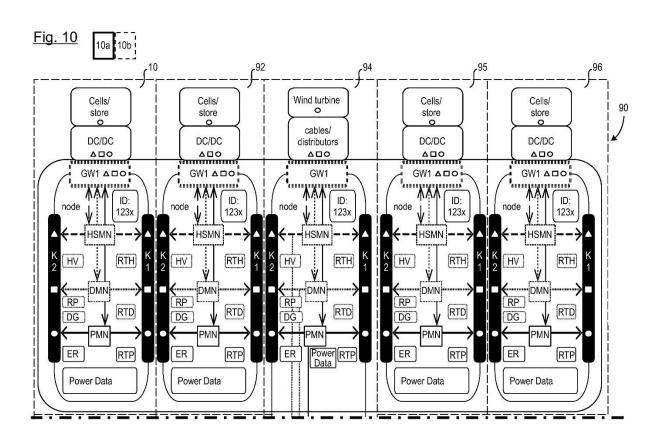
Plaintiff Unicorn Energy AG ("Unicorn") brings the instant patent infringement action against Defendant Tesla Inc. ("Tesla"). Before the Court are the parties' Motions for Summary Judgment. Unicorn seeks summary judgment of no invalidity on several theories: (1) anticipation (2) obviousness (3) written description (4) enablement (5) § 101 and prosecution history estoppel affirmative defenses. ECF No. 373 ("Unicorn Mot."); ECF No. 419 ("Unicorn Reply"). Tesla opposes the motion. ECF No. 402 ("Tesla Opp."). Tesla seeks summary judgment of (1) no presuit damages; (2) no infringement under disallowed theories (3) no infringement for failure to meet the "transport interface" limitation. ECF No. 377 ("Tesla Mot."); ECF No. 418 ("Tesla Reply"). Unicorn opposes the motion. ECF No. 404 ("Unicorn Opp.").

#### I. **BACKGROUND**

#### **Asserted Patent** Α.

Unicorn asserts that Tesla infringes claims 1–3, 5, 7, 9, 10, 19, 24, 26, 27, and 28 of U.S. Patent No. 10,008,869 ("'869 patent" or "asserted patent"). The asserted patent has two independent claims, 1 and 27. The '869 patent describes components of an electrical energy

supply network. '869 Pat. at 1:15–20. According to the patent, conventional batteries could be adapted to different applications with specific power consumption needs by, for example, placing them in series. *Id.* at 1:32–34. The patent states there were known problems that arose when combining prior art batteries and battery cells to make larger battery systems which the '869 patent sought to address by providing a "mobile, stackable, secure and intelligent" component that could connect to an electricity network and store electricity. *Id.* at 1:43–61, 5:17–25. The '869 patent refers to this component as an "energy storing component" ("ESC" or alternatively, energy storage component) and the network it resides in as the "supply network." *Id.* at cl. 1. For example, Figure 10 of the asserted patent illustrates multiple ESCs (items 10, 92, 94, 95, 96, 97 and 98) interconnected to create one larger supply network (90).



The supply network further "compris[es] at least one contact unit for contacting further supply network components of the supply network" and the contact unit has a "transport interface" and "communication interface" responsible for interfacing with other energy storing components. *Id.* at claims 1, 27. The "communication interface" is "for communicating with a further energy

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storing component of the supply network." *Id.* The "transport interface" is "for transporting the electrical energy to the further energy storing component." *Id.* The claims recite other subcomponents as well, including a "gateway" "for coupling the at least one contact unit with the energy store," and a "switch" for "separating [an ESC's] respective energy store from the network medium." *Id.* at claim 27; *see also id.* at claim 1 ("the [ESC] comprises at least one switch for separating the energy store from the network medium").

#### **B.** Accused Products

The accused products include Megapack 1 and Megapack 2 ("Megapack"), Powerpacks 1, 1.5, 2, and 2.5 ("Powerpack"), and Powerwall 2 AC ("Powerwall"). *See* Tesla Mot. at 15. For the Megapack products, Unicorn accuses the "Total" of being the energy storing component (ESC). Unicorn Opp. at 22. For the Powerpack products Unicorn accuses the "Pod" of being the ESC. *Id.*; For the Powerwall, Unicorn accuses Powerwall units (also called PW2AC, AC-Powerwall or AC PW) of being the ESC. *Id.*; Tesla Mot. at 22.

### C. Unicorn's Infringement Contentions

Unicorn's infringement contentions were the subject of motions practice, culminating in limiting orders defining the scope of the contentions. See generally ECF No. 279; ECF No. 307. On the last day of fact discovery, Unicorn moved to amend its contentions. ECF No. 234. Magistrate Judge Susan van Keulen granted in part and denied in part Unicorn's motion. ECF No. 279; ECF No. 304 ("Nov. 7 Hr'g Tr."); ECF No. 284 ("Nov. 14 Hr'g Tr."). Among other things, Judge van Keulen denied Unicorn's motion to add new theories concerning the "gateway," "switch," and "communication interface" limitations. Nov. 14 Hr'g Tr. at 47 (opining Unicorn's to "gateway" and "switch" a "new theory"); ECF No. 279-1 mapping of MP2's (Exhibit A) at 103–06 (denying mapping to "gateway"), 115–33 (denying to "switch"). Judge van Keulen also did not permit Unicorn to amend its mapping doctrine of equivalents theories to address alleged new claim constructions. Nov. 7 Hr'g Tr. at 22 ("amendments based on a new claim construction are not appropriate . . . in amended infringement contentions at this stage"); see also, e.g., ECF No. 279-1 at 32-34. Unicorn filed a motion for relief from Judge van Keulen's order, which this Court denied. ECF No. 307.

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Federal Rule of Civil Procedure 56 governs motions for summary judgment. Summary judgment is appropriate if the evidence and all reasonable inferences in the light most favorable to the nonmoving party "show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986). The current version of Rule 56 authorizes a court to grant "partial summary judgment" to dispose of less than the entire case and even just portions of a claim or defense. See Fed. R. Civ. Proc. advisory committee's note, 2010 amendments; Ochoa v. McDonald's Corp., 133 F.Supp.3d 1228, 1232 (N.D. Cal. 2015).

The moving party "bears the burden of showing there is no material factual dispute," Hill v. R+L Carriers, Inc., 690 F.Supp.2d 1001, 1004 (N.D. Cal. 2010), by "identifying for the court the portions of the materials on file that it believes demonstrate the absence of any genuine issue of material fact." T.W. Elec. Serv. Inc. v. Pac. Elec. Contractors Ass'n, 809 F.2d 626, 630 (9th Cir. 1987). In judging evidence at the summary judgment stage, the Court "does not assess credibility or weigh the evidence, but simply determines whether there is a genuine factual issue for trial." House v. Bell, 547 U.S. 518, 559-60 (2006). A fact is "material" if it "might affect the outcome of the suit under the governing law," and a dispute as to a material fact is "genuine" if there is sufficient evidence for a reasonable trier of fact to decide in favor of the nonmoving party. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986).

Where the moving party will have the burden of proof on an issue at trial, it must affirmatively demonstrate that no reasonable trier of fact could find other than for the moving party. Celotex, 477 U.S. at 325; Soremekun v. Thrifty Payless, Inc., 509 F.3d 978, 984 (9th Cir. 2007). By contrast, where the moving party does not have the burden of proof on an issue at trial, it "must either produce evidence negating an essential element of the nonmoving party's claim or defense or show that the nonmoving party does not have enough evidence of an essential element to carry its ultimate burden of persuasion at trial." Nissan Fire & Marine Ins. Co. v. Fritz Companies, Inc., 210 F.3d 1099, 1102 (9th Cir. 2000).

Once the moving party meets its initial burden, the nonmoving party must set forth, by

affidavit or as otherwise provided in Rule 56, "specific facts showing that there is a genuine issue for trial." *Liberty Lobby*, 477 U.S. at 250 (internal quotation marks omitted). In determining whether a genuine issue of material fact exists, "[t]he evidence of the non-movant is to be believed, and all justifiable inferences are to be drawn in his favor." *Id.* at 255 (citation omitted). If the nonmoving party's "evidence is merely colorable, or is not significantly probative, summary judgment may be granted." *Id.* at 249–50 (internal citations omitted). Mere conclusory, speculative testimony in affidavits and moving papers is also insufficient to raise genuine issues of fact and defeat summary judgment. *See Thornhill Publ'g Co. v. GTE Corp.*, 594 F.2d 730, 738 (9th Cir. 1979). For a court to find that a genuine dispute of material fact exists, "there must be enough doubt for a reasonable trier of fact to find for the [non-moving party]." *Corales v. Bennett*, 567 F.3d 554, 562 (9th Cir. 2009).

#### III. UNICORN'S MOTION FOR SUMMARY JUDGMENT

Unicorn seeks summary judgment of no invalidity on several theories: (1) Tesla cannot corroborate its witness<sup>1</sup> Mr. Greg Tremelling's anticipation and obviousness testimony regarding the A123 Smart Grid Stabilization System ("SGSS"), Unicorn Mot. at 8–16; (2) that all 17 of Tesla's obviousness combinations fail because Tesla cannot show motivation to combine, *id.* at 16–18; (3) Tesla's written description arguments involving the terms "contact unit," "communication interface," "transport interface," and "energy storing component" all fail, *id.* at 18–22; (4) Tesla's enablement arguments for the same four terms all fail, *id.* at 22–23; (5) Tesla has no evidence to support its § 101 and prosecution history estoppel affirmative defenses. *Id.* at 24–25. The Court addresses Unicorn's five arguments in turn.

### A. Corroborating Evidence for Mr. Tremelling's SGSS Testimony

The Court begins with Unicorn's challenge to Tesla's anticipation and obviousness defenses involving the Smart Grid Stabilization System (SGSS) developed by the company A123 Systems, Inc. ("A123"). Unicorn Mot. at 5–8. Tesla contends that before the March 2, 2012, critical date, "A123 developed a modular battery design that it ultimately referred to as the SGSS."

<sup>&</sup>lt;sup>1</sup> The parties dispute whether Mr. Tremelling is an expert or a fact witness, but the Court need not resolve that here. *See* ECF Nos. 325, 381, 396.

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ECF No. 373-2 ("Tesla's Inv. Cont."), Ex. 36 at 3–4. A123 marketed SGSS as a "modular,
scalable, and reconfigurable" solution for the power sector that was designed to "scale[] in
modular increments." ECF No. 402-16 at -649 to -651 (offering a battery container with 2MW of
power and 500kWh of energy by using 18 racks). In 2007, A123 began marketing and offering
SGSS products to customers. ECF No. 402-5. By 2010, A123 installed multiple SGSS units
around the world. ECF No. 402-6 at -964 (discussing SGSS installations in Chile, New York, and
California); ECF No. 402-7 (discussing SGSS project in New York); ECF No. 402-8 (same). At
least two SGSS installations were operational in the United States before March 2012: a 2MW
California installation (operational by 2008) and a 20MW New York installation (operational by
2010). ECF No. 402-9; Unicorn Mot. at 6 (Unicorn does not dispute this fact "for purposes of the
present motion only"). Tesla contends that some of these SGSS systems were "publicly available
or offered for sale" and thus qualify as prior art under 35 U.S.C. § 102(b) (pre-AIA), or were
known or used under § 102(a) (pre-AIA). Unicorn Mot. at 5 (quoting Tesla's Inv. Cont. at 1).
Tesla's expert Dr. Rahn opines that these pre-critical-date SGSS systems constitute "system prior
art to the '869 patent" and either anticipate or, in combination with other art, render obvious the
asserted claims. ECF No. 373-4 ("Rahn Report") ¶ 108.

Unicorn argues that Dr. Rahn's invalidity opinions regarding pre-critical-date SGSS systems cannot meet the "clear and convincing" burden of proof because the only source of evidence crucial to Dr. Rahn's opinion on their construction and operation is uncorroborated testimony provided by Mr. Tremelling. Unicorn Mot. at 8-10. Unicorn argues that for each of the SGSS systems Tesla discloses in its invalidity contentions, "no documentary or corroborated testimonial evidence disclosing their components, construction, circuitry, software, or operation exists in the record." *Id.* at 7, 10; Tesla's Inv. Cont., Ex. 36 at 7, 17, 127, 206–10.

Tesla responds with evidence relating to four A123 projects that it claims corroborate Mr. Tremelling's testimony: a BAE electric bus battery system ("BAE Project"), an L20/L21 hybrid vehicle battery system ("L20/L21 Project"), a proposed SGSS installation in Spain ("Almacena Project"), and a proposed SGSS installation in Italy ("ENEL Project"). Tesla argues that the BAE Project and L20/L21 Project evidence "provides sufficient basis for a reasonable factfinder to find

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(1) SGSS used the vehicle battery rack architecture and, like the vehicle rack [battery management system ("BMS")], the SGSS rack BMS would (2) cooperate with the communication interface to autonomously identify incompatibility and (3) control contactors to separate the rack from the DC power bus." Tesla Opp. at 6. Tesla further contends that the Almacena project and ENEL Project "evidence provides a reasonable factfinder sufficient basis to find all SGSS used the same circuits and methodologies." Id. at 9.

Unicorn contends that the only thing tying these documents "to pre-critical-date SGSS systems is Mr. Tremelling's [uncorroborated] say-so." Unicorn Mot. at 7.

On summary judgment for anticipation or obviousness, a moving party "must show that the nonmoving party, who bears the burden of proof at trial, failed to produce clear and convincing evidence on an essential element of a defense upon which a reasonable jury could invalidate the patent." Eli Lilly & Co. v. Barr Labs., Inc., 251 F.3d 955, 962 (Fed. Cir. 2001); Telemac Cellular Corp. v. Topp Telecom, Inc., 247 F.3d 1316, 1327 (Fed. Cir. 2001) ("Although anticipation is a question of fact, it still may be decided on summary judgment if the record reveals no genuine dispute of material fact.")

"Oral testimony by an interested party on its own will generally not suffice as "clear and convincing" evidence of invalidity." TransWeb, LLC v. 3M Innovative Properties Co., 812 F.3d 1295, 1301 (Fed. Cir. 2016). "Rather, such oral testimony must be corroborated by some other evidence." Id. (citing Woodland Trust v. Flowertree Nursery, Inc., 148 F.3d 1368, 1371 (Fed. Cir. 1998). "[T]he need for corroboration exists regardless [of] whether the party testifying concerning the invalidating activity is interested in the outcome of the litigation (e.g., because that party is the accused infringer) or is uninterested but testifying on behalf of an interested party." Finnigan Corp. v. Int'l Trade Comm'n, 180 F.3d 1354, 1367 (Fed. Cir. 1999).

"Whether testimony is sufficiently corroborated is ultimately a question of fact." *Mosaic* Brands, Inc. v. Ridge Wallet LLC, 55 F.4th 1354, 1363 (Fed. Cir. 2022); see also Adenta GmbH v. OrthoArm, Inc., 501 F.3d 1364, 1371-72 (Fed. Cir. 2007) ("Assessing the sufficiency of evidence which corroborates a witness's testimony concerning invalidating activities . . . is a jury question."). "When determining whether an alleged inventor's testimony is sufficiently

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corroborated, we apply a rule-of-reason analysis and consider all pertinent evidence." <i>Mosaic</i>
Brands, 55 F.4th at 1363 (quoting Martek Biosciences Corp. v. Nutrinova, Inc., 579 F.3d 1363,
1374 (Fed. Cir. 2009)). "This rule-of-reason analysis does not require every aspect of an
inventor's testimony to be explicitly corroborated with a source independent of the inventor." <i>Id.</i> ;
see also Finnigan, 180 F.3d at 1369 ("The law does not impose an impossible standard of
'independence' on corroborative evidence by requiring that every point [necessary to prove
invalidity] be corroborated by evidence having a source totally independent of the inventor; indeed
such a standard is the antithesis of the rule of reason."). "Possible corroborating evidence, from
most to least probative, includes documentary and physical evidence created at the time of
conception or reduction to practice, circumstantial documentary evidence about the inventive
process, and oral testimony by someone other than the inventor." Mosaic Brands, 55 F.4th at
1363; see Sandt, 264 F.3d at 1350–51.

As an initial matter, Dr. Rahn relies heavily on Mr. Tremelling's testimony for much of the evidence regarding the pre-critical-date SGSS installations. As Unicorn notes, Dr. Rahn has never seen or inspected an SGSS in person. ECF No. 373-6 ("Rahn Dep.") 54:4-55:3. Furthermore, Dr. Rahn clearly relies on Mr. Tremelling for certain evidence about the SGSS software. *Id.* 162:10– 18; see also id. at 96:15–18 ("I don't recall looking at source code for SGSS, no, but I did, as I said, rely on at least Mr. Tremelling to talk about software."). Because critical elements of Dr. Rahn's opinion pertaining to the A123 SGSS rely on Mr. Tremelling's testimony, Tesla must corroborate that testimony. *TransWeb*, 812 F.3d at 1301.

As Unicorn notes, the rule-of-reason test need not be applied here. See Unicorn Reply at 8; Transweb, 812 F.3d at 1301 ("A rule of reason analysis is used to determine the sufficiency of corroboration, under which all *pertinent* evidence is examined in order to determine whether the inventor's story is credible.") (internal quotation marks omitted, emphasis added)); Finnigan, 180 F.3d at 1368–69 (distinguishing *necessity* of corroboration from *sufficiency* of corroboration). Rather, corroboration is ultimately a question of fact reserved for the jury, so Tesla need only put forth pertinent evidence to create a genuine dispute of material fact to survive summary judgment. Adenta, 501 F.3d at 1371–72.

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Tesla does not dispute Unicorn's argument that there is a dearth of evidence about the internal workings of the SGSSs that qualify as prior art. Rather, Tesla puts forth evidence that it claims corroborates Mr. Tremelling's testimony by "establishing the shared architecture and operation of all A123 scalable energy storage systems, including SGSS," Tesla Opp. at 2, specifically the SGSS compared to four other A123 projects: the BAE project, the L20/L21 project, the Almacena project, and ENEL project. The Court first addresses the BAE and L20/L21 projects together, then the two international SGSS projects together.

First, Tesla argues that a battery installation for the company BAE Systems on hybrid electric vehicles such as passenger buses (the "BAE project") based on the "Hoff" patent application corroborates Mr. Tremelling's testimony. More than one year prior to the '869 patent's critical date, A123 developed a novel modular energy storage design. That design was described in U.S. Pat. Publication No. 2007/0279953 ("Hoff"), titled "Multi-Configurable, Scalable, Redundant Battery Module with Multiple Fault Tolerance." Mr. Tremelling is a named inventor of Hoff. Hoff was published in December 2007 and the parties do not dispute that it is prior art to the '869 patent. Rahn Report ¶ 102 (listing Hoff as prior art); id. ¶ 179–199 (opining that the asserted patent is obvious in light of five obviousness combinations that include Hoff); Unicorn Mot. at 15 ("the Hoff application was published before the critical date and thus is prior art"). According to Tesla, the BAE project is a commercial embodiment of Hoff's modular energy storage design. As early as 2008, BAE used an A123 battery rack with each of its next generation hybrid electric buses. ECF No. 408-3. Tesla argues that "contemporaneous evidence confirms the battery rack A123 developed for BAE was based on Hoff." Tesla Opp. at 5. Tesla supports this claim with evidence that the BAE rack consisted of modules having battery cells, each rack included ports for communicating and transporting electrical power between racks, the BAE rack had a scalable configuration, and like Hoff, the BAE rack also had a battery management system ("BMS") that coupled the communication interface and the battery modules. ECF No. 408-3; see also Rahn Report ¶ 389 (annotating BAE diagram); ECF No. 408-5 (2008 BAE BMS Theory of Operation). Although BAE used one battery rack per bus, as described in Hoff, Tesla puts forth evidence that "the A123 system was designed for modularity and was thus capable of performing

rack-to-rack communication." ECF No. 408-7 (showing bi-directional interfaces for
communication (J80) and DC energy transport (J81/J82)). Tesla presents technical evidence
comparing the BAE project, and hybrid vehicle projects in general, to the prior art SGSS.
Compare, e.g., ECF No. 402-11 ("Hoff") at Figs. 2-3 (showing battery modules (108), BMS
(110), communication interface (114), transport interface (106), and isolating switch (130)), with
ECF No. 408-7 (showing 16 battery "Modules" (top left), "BMS" (bottom), communication
interface (J80, right side), transport interface (J81/J82, right side), and isolating switch (contactors
CT1/CT2, middle)). Tesla also puts forth non-technical evidence suggesting a similarity in the
systems. See ECF No. 402-16 at -649 (January 2011 website stating "A123 Systems Smart Grid
Stabilization Systems (SGSS <sup>TM</sup> ) apply technology used in hybrid electric transportation to meet
the power sector's growing need for energy space"); 402-17 at -501 (December 2011 article
stating, "A123's GBS [Grid Battery System] applies the technology used in hybrid electric
transportation").

Tesla also argues that a similar automotive battery project, the L20/L21 Project, corroborates Mr. Tremelling's testimony about how the A123 SGSS works. Tesla puts forth evidence that the BAE project and L20 battery racks share the same architecture because they have multiple batteries connected in series; both include a CAN-based communication interface for bi-directional data transmission; both include an interface for bi-directional transmission of DC power within the rack; each of the racks includes an HV contactor which is connected to a BMS; and, in both, the HV contactor is placed between the batteries and the transmission interface to allow it to switch ON/OFF the flow of electrical energy between the batteries and the DC bus. Tesla Opp. at 8; Compare ECF No. 408-7 at -174, with ECF No. 408-8 at -17, -20, -27. Tesla also points to two documents, the A123 L20/L21 Interface Control Document (ECF No. 408-8, a 2010 document) and L21 Battery System Developer's Guide (ECF No. 408-9, a 2009 document), as evidence that the "A123's BMS caused the rack to separate from the DC power bus in response to an 'autonomous identification of incompatibility" because the documents describe functions of the BMS within an A123 system. ECF No. 408-8 at -39, -58, -64; ECF No. 408-9 at -697.

Unicorn argues in reply that it is undisputed that the BAE project and L20/L21 project

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represent different products than the prior art SGSS. Unicorn Reply at 4. Unicorn notes that
neither project is claimed as prior art in Tesla's invalidity contentions and that Tesla "does not
contend that the hybrid bus battery is an SGSS or that the bus anticipates any asserted claim."
Unicorn Reply at 4; Unicorn Mot. at 13. Unicorn also argues that the BAE and L20/L21 projects
"are not the same as SGSS battery packs" because they "have different features, such as a
different size, shape, and number of battery modules." Unicorn Reply at 4. Thus, Unicorn argues,
"Tesla cannot 'rely on document[s] regarding [] different product[s] in presenting a system
invalidity theory related to the [SGSS]." Id. (quoting Spex Techs. v. Kingston Tech. Corp., 2020
WL 4342254, at *16 (C.D. Cal. June 16, 2020). But there is no requirement that the BAE and
L20/L21 projects be prior art or have identical features to the alleged prior art. They only need to
corroborate Mr. Tremelling's testimony about the architecture and features of SGSS installations
that are the claimed prior art. Because of this distinction, <i>Spex</i> is distinguishable. There, the court
ruled in a motion in limine that an expert "should not be permitted to rely on a Fortezza Plus Card
document for a Fortezza Crypto Card invalidity theory." Spex, 2020 WL 4342254, at *2, *16.
The court reasoned that because the two cards were different products, testimony about the Plus
Card "lacks probative value and could lead to jury confusion." <i>Id.</i> at *16. Here, the BAE and
L20/L21 evidence is relevant as it is Tesla's means to corroborate Mr. Tremelling's testimony
about prior art SGSS installations. That said, the BAE and L20/L21 evidence is not direct
evidence of how SGSS installations work. It will be important at trial to instruct the jury that the
sole purpose of this evidence is corroboration, and that it is not direct evidence of the structure and
operation of the prior art SGSS. But that alone does not diminish its relevance and probative
value as corroborating evidence.

All that is required here is evidence that corroborates Mr. Tremelling's testimony. To that, Tesla has provided both technical and non-technical evidence suggesting that the two systems are similar to the SGSS, which in turn corroborates Mr. Tremelling's testimony that the A123 projects have shared architecture and operation. The standard here is not whether the BAE project or L20/L21 project qualify as prior art or are identical to prior art SGSS installations. The question here is whether it is undisputed that the documents do not corroborate Mr. Tremelling's testimony.

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On that count, Tesla has submitted sufficient evidence to demonstrate disputed facts. That said, the Court reiterates that it makes no finding here about the credibility of the evidence, only that Tesla's evidence is pertinent. Whether Tesla's BAE project and L20/L21 project evidence sufficiently corroborate Mr. Tremelling's testimony is a question of fact for the jury.

Tesla also points to evidence from two other SGSS projects, the Almacena project in Spain, ECF No. 408-4, and the ENEL Project in Italy. ECF No. 408-11. Tesla argues that evidence about these SGSS Projects corroborates Mr. Tremelling's testimony because "[e]very installation of SGSS used the same basic architecture." Tesla Opp. at 6. For example, according to Tesla, the 1MW Almacena SGSS project proposal identifies the 2MW SGSS installation in California and the 20MW installation in New York as "other A123 installations" having "a similar" physical enclosure. ECF No. 408-4 at -373, -374, -378.

Tesla argues that the Almacena project proposal confirms the design of prior art SGSS. Tesla Opp. at 9. Tesla puts forth as evidence several photos that offer a basic glimpse at the layout of the systems. Id. at -650; ECF No. 402-9 at -657. Tesla argues that the photos are consistent with A123's 2011 website offering "individual unit[s]" with 2MW of power. ECF No. 402-16 at -650. Furthermore, a 2011 document states that A123 "grid storage systems deployed in the field today use a similar 16m enclosure" to A123's Almacena project proposal. ECF No. 408-4 at -378 (identifying other SGSS installations including those in CA and NY). Tesla also claims that this exhibit includes a "representative control system diagram" and a representative electrical one-line diagram. Id. at -373, -374. According to Tesla, this evidence shows that A123 could change the number of battery racks in the Energy Storage System (ESS) without changing the architecture of the rest of the ESS. *Id.* at -373 (depicting 18 BMS units by using an ellipsis between "BMS 2" and "BMS 17"), -374 (depicting 30 battery racks with ellipses labeled "30 X" between two racks).

Tesla also argues that the ENEL Project evidence confirms the design of prior art SGSS. Tesla Opp. at 10–11. Central to Tesla's argument is a one-line diagram relating to the ENEL drawn by Mr. Tremelling in December 2011. ECF No. 408-11. Tesla argues that the one-line diagram of the ENEL is evidence that 1) the ENEL ESS includes multiple battery racks; 2) a "Contactor" is also used to switch ON/OFF the connection between each battery rack and a

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common 960V DC bus; 3) each BMS receives an ethernet signal connection, receives an AC auxiliary power supply, and is connected with the PLC and the Zone Controller (ZCR); 4) and that like in the Almacena project, the ENEL project has electrical connections to the PCS inverter through the common DC bus bar and the PLC. Id.

This evidence supports Tesla's arguments about the SGSS similarity with respect to power capacity, modularity, and features in such a way that it could corroborate Mr. Tremelling's testimony. The Court reiterates though, that this evidence alone would not be sufficient to prove the SGSS characteristics of the qualified and disclosed SGSS prior art. Spex, 2020 WL 4342254, at \*16. Nor does the Court decide the factual question of sufficiency of this corroborating evidence. The Court only finds that this evidence creates a genuine dispute of material fact about corroboration sufficient to survive summary judgment.

Unicorn's counterarguments fail. Unicorn argues that the architecture of the one-line diagram for the ENEL system differs from that of the Almacena one-line diagram enough that it "negates the basis of Dr. Rahn's entire SGSS analysis." Unicorn Mot. at 12. Unicorn's evidence supporting this claim is an excerpt of Dr. Rahn's testimony where he acknowledges that the two diagrams have different power capacity and "might" have a different battery rack layout. Id.; ECF Rahn Dep. 187:20–189:10. Tesla responds, "[t]he AC and DC power one-line diagram shows electrical characteristics of the system, not physical characteristics" and that the "system capacity argument is also irrelevant" because "the SGSS is designed as a modular system that allows capacity to be adjusted by changing the number of battery racks without needing to change the system architecture." Tesla Opp. at 11 (emphasis in original). Differences between the two diagrams will be important for determining the weight of the evidence, but Unicorn has not identified a contradiction that indisputably undermines the one-line diagrams.

Unicorn also argues that Tesla has no evidence: 1) tying the Almacena and ENEL to a precritical-date SGSS; 2) that these draft schematics are for an SGSS at all, as opposed to a latergeneration grid storage system; 3) that SGSS installations share a common architecture. Unicorn Reply at 6. These are all valid criticisms, but the Court disagrees that there is **no** evidence in the record. Tesla's evidence of the similar physical layouts of SGSS Projects, the designs in the one-

line diagrams, and the evidence of similarities in the SGSS Projects and the BAE Project and L20/L21 Project, all discussed above, together are enough pertinent evidence that a jury could find that it corroborates Mr. Tremelling's testimony. *Adenta*, 501 F.3d at 1371–72.

Rolls-Royce, cited by Unicorn, is also distinguishable. See Unicorn Mot. at 14–15. There, a prior art inventor testified the prior art device had a certain construction, but other knowledgeable fact witnesses testified to the opposite, and there were no contemporaneous documents to resolve the disagreement. See Rolls-Royce, Ltd. v. GTE Valeron Corp., 625 F. Supp. 343, 353 (E.D. Mich. 1985). Additionally, a May 1972 document reciting a best delivery date of October 1972 cast "serious doubt" on testimony that the prior art device was reduced to practice before September 1972. Id. (finding, "given this state of the evidence, defendant has not carried its burden"). While Unicorn's challenges to Mr. Tremelling's testimony are valid, they have not raised any issue that casts a similar "serious doubt" on his testimony of Tesla's corroborating evidence.

In sum, the Court finds that Tesla's BAE, L20/L21, Almacena, and ENEL evidence together are sufficient to create a factual dispute over the sufficiency of contemporaneous documentary evidence corroborating Mr. Tremelling's testimony about the architecture and operation of the A123 SGSS. As such, the Court denies Unicorn's motion for summary judgment on Tesla's anticipation and obviousness theories involving prior art SGSS installations.

### B. Obviousness

The Court now turns to Unicorn's assertion that Tesla cannot prove obviousness. Tesla's expert Dr. Rahn identifies 17 prior art combinations that he opines render the '869 patent obvious. Unicorn argues that Dr. Rahn never provides a substantive explanation why a POSITA would have been motivated to combine or modify the prior art references in the manner he asserts would render asserted claims obvious for any of the proposed combinations. Unicorn Mot. at 16.

Unicorn first argues that Dr. Rahn offers only conclusory, boilerplate assertions of motivation to combine without providing any reasoning or factual support. Unicorn Mot. at 16–17. Unicorn also argues that Dr. Rahn improperly opines on motivation to investigate instead of motivation to combine particular elements. Unicorn Mot. at 17. Tesla responds by citing lengthy

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sections of Dr. Rahn's report where he discusses obviousness, Rahn Report ¶¶ 101–869, then describing one representative combination, U.S. Publication No. 2009/0133733, entitled "Autonomous, Modular Power Generation, Storage and Distribution Apparatus, System and Method Thereof" ("Retti") and U.S. Patent No. 6,882,129, entitled "Battery Pack for a Battery-Powered Vehicle" (Boskovitch). Tesla Opp. at 17. Tesla also argues that Unicorn mischaracterizes what the law requires for motivation to combine. Tesla Opp. at 18.

"To invalidate a patent claim based on obviousness, a challenger must demonstrate 'by clear and convincing evidence that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so." ActiveVideo Networks, Inc. v. Verizon Communs., Inc., 694 F.3d 1312, 1327 (Fed. Cir. 2012) (quoting Procter & Gamble v. Teva Pharms. USA, Inc., 566 F.3d 989, 994 (Fed. Cir. 2009)). "While it is true that motivation to combine is a question of fact, mere conclusory arguments by an expert without factual support are not 'sufficient for the question of obviousness to reach the jury.'" Asetek Danmark A/S v. CoolIT Sys. Inc., No. 19-CV-00410-EMC, 2022 WL 21306656, at \*7 (N.D. Cal. Oct. 25, 2022) (quoting ActiveVideo Networks, 694 F.3d at 1327). An invention is not obvious under section 103 "just because it was obvious 'to explore a new technology or general approach that seemed to be a promising field of experimentation, where the prior art gave only general guidance as to the particular form of the claimed invention or how to achieve it." Procter & Gamble Co., 566 F.3d at 997 (quoting In re O'Farrell, 853 F.3d 894, 903 (Fed. Cir. 1988)). "The nature of the problem to be solved by the invention, however, can provide the motivation to combine teachings from different references to arrive at the claimed system." Danmark v. CMI USA, Inc., 100 F. Supp. 3d 871, 884 (N.D. Cal. 2015) (citing Ruiz v. A.B. Chance Co., 357 F.3d 1270, 1276 (Fed. Cir. 2004)).

The Court begins with the one representative obviousness combination briefed by Tesla, Dr. Rahn's opinion on Retti and Boskovitch. Tesla Opp. at 17. Dr. Rahn opines that Retti teaches communications between battery modules and an electric vehicle, Rahn Report ¶ 126–30, and that Boskovitch teaches a solution for communicating between battery modules in an electric vehicle. *Id.* ¶¶ 175–77. Dr. Rahn opines that a POSITA designing the battery system in Retti

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would be motivated to investigate Boskovitch's communication solution. <i>Id.</i> ¶¶ 226–29
(motivation to combine); $id$ . ¶¶ 711–19 (obviousness analysis for claim 24). Specifically, Dr.
Rahn opines, "A POSITA would have been motivated to combine Retti and Boskovitch" because
"[b]oth come from the same field and serve complementary purposes." <i>Id.</i> $\P$ 226. Dr. Rahn
opines that "Retti claims an electrical vehicle using an electrical power storage module to supply
electrical power, including a communication module and a communication bus to provide charge
information to the electric vehicle." <i>Id.</i> $\P$ 227. He then opines that "Boskovitch is complementary
to that purpose" because it "discloses a battery pack for a battery-powered vehicle" and "teaches
aspects of battery pack-to-battery pack communications with communication buses" and that
"[e]ach of the battery packs 'preferably communicates time-based and asynchronous data to the
overall vehicle system." $\mathit{Id}$ . ¶ 228 (quoting Boskovitch 7:46–48). Dr. Rahn concludes, "a
POSITA would have been motivated when designing the autonomous battery module / power
storage module for use in various hosts including vehicles to investigate Boskovitch's solution
related to communications between battery modules and communications with the host (e.g.,
vehicle)." Id. ¶ 229.

Here, Dr. Rahn merely describes basic aspects of the battery field covered by the two references. As an initial matter, Dr. Rahn has provided no facts supporting motivation to combine other than high-level descriptions of the Retti and Boskovitch references. Nothing is said about the references except that they describe car batteries with communication properties. The opinion is generic and conclusory enough that it is not sufficient for the question of obviousness to reach the jury. Asetek, 2022 WL 21306656, at \*7. Furthermore, that two references fall within the same general field alone does not demonstrate motivation to combine. Securus Techs., Inc. v. Glob. Tel\*Link Corp., 701 F. App'x 971, 977 (Fed. Cir. 2017) ("Securus failed to explain how or why the skilled artisan would combine the teachings [of the two references] . . . . [A] broad characterization of [the two references] as both falling within the same alleged field . . . is not enough for Securus to meet its burden of presenting a sufficient rationale to support an obviousness conclusion."). Here, Dr. Rahn does little more than opine that a POSITA would combine Retti and Boskovitch because they involve batteries in cars that communicate with the

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car. This "broad characterization" of the prior art in describing similar issues in the field of batteries is insufficient to support an obviousness opinion. Securus, 701 F. App'x at 977. Finally, the motivation to combine should bear some relation to a "specific combination of prior art elements" or should "explain why a person of ordinary skill in the art would have combined elements from specific references in the way the claimed invention does." ActiveVideo, 694 F.3d at 1328 (emphasis in original). Dr. Rahn's opinion is a generic description of the prior art and makes no specific reference to the claimed invention, and thus does not meet this standard.

Unicorn also argues that Dr. Rahn failed to analyze obviousness at the time of the invention. Unicorn Mot. at 16–18. Because the Court finds that the opinion is conclusory and overly broad such that it fails as a matter of law, the court need not address this argument.

As the Court noted at the hearing, Tesla's 17 obviousness combinations rise and fall together. Apr. 4 Hr'g Tr. 56:21–24 ("I will only analyze the one representative combination that you walked me through the Rahn Report on and assume it's representative and it will rise or fall on that combination."). Tesla contends that the burden is on Unicorn to "identify the failures" and argues that it was forced "in a limited number of pages to go through all 17." Id. 57:9-12. But Unicorn did "identify the failures" by arguing that "Dr. Rahn never provides a substantive explanation, for any of his proposed combinations." Unicorn Mot. at 16; id. at 17 (identifying a shortcoming as a "common refrain in his report"); id. ("For each combination . . ."); id. at 18 ("This sort of illogical argument plagues Dr. Rahn's reasoning throughout"). Unicorn also cites potential issues throughout the report. See id. at 16 (citing Rahn Report ¶¶ 179, 182, 191, 219, 212, 222, 225–26, 232–33, 239). Upon this showing by Unicorn, the burden shifts to Tesla to identify "specific facts showing that there is a genuine issue for trial" for each of its combinations. See Liberty Lobby, 477 U.S. at 250. Because Tesla bases its argument for all 17 combinations on the Retti and Boskovitch "example," a finding that the example fails as a matter of law can reasonably be applied to the remaining 16 combinations. Furthermore, Tesla cites nearly 700 paragraphs of Dr. Rahn's obviousness opinion in its opposition, but does not explain any combination other than Retti and Boskovitch in detail. Tesla Opp. at 17 (citing Rahn Report ¶¶ 101–869). This choice by Tesla not to describe the other 16 combinations could alone be grounds

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for summary judgment. See Traxcell Techs., LLC v. Sprint Commc'ns Co., 15 F.4th 1121, 1133 (Fed. Cir. 2021) (affirming summary judgment of non-infringement where patent owner "cited swaths of documents" but "failed . . . to explain how those documents support its infringement theory"). Finally, Tesla's position is not particularly sympathetic in light of its acknowledgement at the hearing that "we certainly don't intend to proceed to trial on 17 [obviousness combinations]." Apr. 4 Hr'g Tr. 57:2-3.

Thus, the Court finds that each of Dr. Rahn's obviousness combinations fails to raise a triable issue of fact. Accordingly, the Court GRANTS Unicorn's motion for summary judgment on all 17 of Tesla's obviousness combinations.

#### C. **Written Description**

The Court now turns to Unicorn's written description argument. Written description requires the specification to "clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed." Ariad Pharmas., Inc. v. Eli Lilly & Co., 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). Put differently, the disclosure in the patent must "reasonably convey[] to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." Id.

As the Federal Circuit has recognized, the term "possession" "has never been very enlightening." Ariad, 598 F.3d at 1351. Nevertheless, it implies a documentary function: the inventor must not only know how to practice the invention, but must prove that understanding through the disclosure in the specification. *Id.* Otherwise, if written description was not required, a patentee could claim a "mere wish or plan" without having fully invented anything, and thus improperly exclude others from the field. See Regents of the U. of Cal. v. Eli Lilly & Co., 119 F.3d 1559, 1566 (Fed. Cir. 1997); *Ariad*, 598 F.3d at 1352–53 ("[R]equiring a written description of the invention plays a vital role in curtailing claims . . . that have not been invented, and thus cannot be described."); O'Reily v. Morse, 56 U.S. 62, 120–21 (1853) (explaining the "evil" of lack of written description as "prevent[ing] others from attempting to improve upon the manner and process which [the patent owner] has described in the specification"). Thus, evidence of actual "possession" of the invention is not enough; "it is the specification itself that must demonstrate

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possession." Ariad, 598 F.3d at 1352. The precise form of the disclosure may vary. "It is not necessary that the exact terms of a claim be used in haec verba [in these words] in the specification." Nalpropion Pharmas., Inc. v. Actavis Labs. FL, Inc., 934 F.3d 1344, 1350 (Fed. Cir. 2019). Instead, "equivalent language may be sufficient." Id.

Dr. Rahn's report opines that the specification fails to provide written description for four terms in the asserted patent, "contact unit," "communication interface," "transport interface," and "energy storing component." The Court addresses each in turn.

### 1. Contact Unit

Unicorn argues that Tesla cannot prove invalidity based on lack of written description of "contact unit." Unicorn Mot. at 18–19. Dr. Rahn opines that "if a 'contact unit' is to be interpreted to encompass two or more different and separate points of electrical connection, . . . there is no such disclosure in the patent." See Rahn Report ¶ 901. He then opines later in a written description section, "In view of that lack of disclosure, a POSITA would not believe that the inventor had possession of a "contact unit" that has two or more different and separate points of electrical connection." Id. ¶ 940.

Unicorn argues that this is a claim construction issue that the "Court has already resolved" when it "determined that the claimed 'contact unit' can have multiple electrical contacts." Unicorn Mot. at 18–19. Tesla disputes Unicorn's characterization of the Claims Construction Order, and argues that "each of the embodiments in the '869 patent show a 'contact unit' as a 'single component' containing one or more electrical contacts." Tesla Opp. at 20 (citing Rahn Report ¶¶ 902–04). Tesla also argues that "the Court's claim construction did not permit the 'contact unit' to be distributed across multiple components." Tesla Opp. at 19. Tesla argues that the patent only provides the "plug and cable" as an "alternative" to the contact unit and thus "is unrelated to whether there is sufficient written description for a "contact unit" that is distributed across multiple components." Id. at 20. Unicorn replies, "Tesla and Dr. Rahn never explain why a POSITA reading the specification would believe the contacts must all be part of a single device, other than to point to the admitted nonce word 'unit." Unicorn Reply at 13. The Court addresses Tesla's arguments regarding the Claims Construction Order and then whether the patent discloses

the contact unit.

The Court first notes that its Claims Construction Order did not address written description. However, the Court's construction of "contact unit" is relevant to analyzing written description. The '869 patent provides, "A contact unit is provided which enables rapid coupling and separation of individual housings among one another." '869 patent 11:6–7. In other words, the contact unit is a way to connect two batteries.

As an initial matter, the Claims Construction Order does not limit how the contact unit connects components. At Claims Construction, Unicorn proposed that "contact unit for contacting a further energy storing component" means "electrical contact(s) for electrically connecting a further energy storing component," which the Court adopted. ECF No. 169 ("CC Order") at 11. The parties disputed, and the Court found, that the term "connoted structure to a person of skill in the art." *Id.* at 17. The Court rejected Tesla's argument that the definition reads out preferred embodiments, writing that it "requires that the contact units are electrically connected but *places no other limit on how the contact units are connected*" and that "the contact units may be connected by permanent magnets *or other means*, so long as the contact units are also electrically connected." *Id.* at 18 (emphasis added). Given the broad construction of the term, nothing in the Claims Construction Order requires that the contact unit be a "single component" or rules out a contact unit that is distributed across multiple components or that connects components with plugs and cables.

The question then is whether the patent discloses a contact unit with "different and separate points of electrical connection." Rahn Report ¶ 901. The patent itself provides examples of a contact unit that allows batteries to be connected like Legos:

In the example, the cylindrical form was chosen, which in terms of design is also intended to be reminiscent of the symbolism of existing battery standards. In a manner similar to a cylindrical alkaline battery, contact is made by two contact units at two cylinder ends, the base surface and the top surface of the cylinder. These two contact blocks can be pressed against one another magnetically or mechanically for secure plug-in.

*Id.* 11:7–15. The patent also describes a "plug and cable" for connections:

From the corner data mentioned above, it is possible to define a design

for a supply network component in which the energy stores, the energy sources and the energy consumers are then optionally combined among one another by plugs and cables but also by individual contact units being simply plugged together. In this regard, by way of example, it is possible to plug an AC/DC converter (power supply unit) with one or a plurality of batteries in series and charging can begin.

*Id.* 11:16–24. The Court finds that this passage on "plugs and cables" describes an example of a contact unit, and thus provides adequate written description. Even if it was not an alternative, by disclosing plug and cable, the patent hardly "prevents others from attempting to improve upon the manner and process which [the patent owner] has described in the specification." *O'Reily*, 56 U.S. at 120–21.

Accordingly, the Court finds that Tesla's written description argument regarding "contact unit" fails as a matter of law and thus, Unicorn's motion on this issue is granted.

#### 2. Communication Interface

Unicorn next argues that Tesla cannot establish invalidity based on lack of written description of "communication interface." Unicorn Mot. at 19. The asserted patent describes a "communication interface" "for communicating with a further energy storing component of the supply network" '869 patent at Claims 1, 27; Tesla's Inv. Cont. at 105–114; Rahn Report ¶ 937–947. Dr. Rahn opines, that "if [claim 1] is interpreted more broadly to allow for indirect communications through a network (such as a CAN network), there is no such disclosure in the patent." *See* Rahn Report ¶ 909. In his view, "a POSITA would not believe that the inventor had possession of a 'communication interface' that uses indirect communications through a network (such as a CAN network)." *Id.* ¶ 943.

Unicorn argues that this opinion is wrong as a matter of law because claim 1 is an apparatus claim, and thus the invention need only "possess the *capability* of performing the recited function." Unicorn Mot. at 19. Tesla does not dispute that claim 1 is an apparatus claim. Rather, Tesla points to four types of indirect communication listed in the patent – capacitive, inductive, optical and RFID – as evidence that the asserted patent never discusses indirect wireless communications. Unicorn replies that aside from attorney argument, Tesla offers no evidence on the issue because Dr. Rahn is silent on the four types of communication.

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Unicorn focuses on capability, a method versus apparatus issue for infringement, but cites no authority in its briefing connecting this issue to that of written description. Unicorn relies on Intel Corp. v. U.S. International Trade Commission, 946 F.2d 821, 832 (Fed. Cir. 1991), a case about functional language in an apparatus claim. But that case discusses the capability of a product accused of infringing, not written description. Id. ("GI/M also contends that the Commission's finding of infringement under the doctrine of equivalents is incorrect because, although GI/M's 'old' design 51 Series EPROMs are capable of performing page mode addressing, the EPROMs were never sold to operate in page mode.") (emphasis in original). The Court sees no reason to connect these disparate fields of patent law.

There may be merit to an argument from Unicorn's hearing demonstratives that "[a] specification may . . . contain a written description of a broadly claimed invention without describing all species that claim encompasses." *Utter v. Hiraga*, 845 F.2d 993, 998 (Fed. Cir. 1988). But the argument is untimely. Unicorn's papers are silent on this argument, so Tesla was given no opportunity to respond to it.

Accordingly, Unicorn has not shown that Tesla's argument that the specification does not provide written description of the "communication interface" fails as a matter of law and thus, Unicorn's motion on this issue is denied.

### 3. Transport Interface

Unicorn further argues that Tesla cannot establish invalidity based on lack of written description of "communication interface." Unicorn Mot. at 20. The asserted patent describes a "transport interface" for "transporting the electrical energy to the further energy storing component." Id. Dr. Rahn opines that "if the claim is interpreted more broadly to allow for indirect[ly] transporting energy through a network, there is no such disclosure." Rahn Report ¶ 914. According to Dr. Rahn, a POSITA would thus "not believe that the inventor had possession of a 'transport interface' that uses indirect communications [sic] through a network." Id. ¶ 945.

Unicorn argues that "Tesla's challenge here fails for the same reasons as for the 'communication interface' limitation." Unicorn Mot. at 20. Essentially, Unicorn argues that the functional language in the apparatus claim does not require any particular method of use, so the

"correct inquiry is whether a POSITA would believe that the inventor had possession of a transport interface *capable* of indirect energy transportation through a network." *Id.* at 20. Tesla responds with passages from Dr. Rahn's Report opining that there is a lack of written description. Tesla Opp. at 20–21 (citing Rahn Report ¶¶ 914–18, 944–45).

Unicorn's "capability" argument fails for the same reasons described above in the "communication interface" subsection. As discussed in the previous subsection, Unicorn's functional language argument is based on an unrelated case about infringement. *Intel*, 946 F.2d at 832. And Unicorn's argument based on *Utter*, 845 F.2d at 998, is untimely. As such, Unicorn has not shown that Tesla's argument that the specification does not provide written description of the "transport interface" fails as a matter of law and thus, Unicorn's motion on this issue is denied.

### 4. Energy Storing Component

Unicorn's final written description argument is that Tesla cannot prove invalidity based on lack of written description of "energy storing component." Unicorn Mot. at 21. The asserted patent describes an "energy storing component" that, among other things, is "configured to cooperate with the communication interface such that the energy storing component is separated from the network medium in response to an autonomous identification of incompatibility of the energy storing component with the present supply network." '869 patent at Claim 1; see also id. at Claim 27 (similar). Tesla challenges the specification's support for the "autonomous identification of incompatibility" and "separat[ion]" claim limitations. See Rahn Report ¶¶ 920, 927. The Court addresses each in turn.

Unicorn argues that Dr. Rahn's opinion improperly seeks to undo this Court's claim construction and fails to consider the express "autonomous" disclosure in combination with other portions of the specification. Unicorn Mot. at 21. Tesla responds by citing Dr. Rahn's opinion that the asserted patent only discusses the term "autonomous" in an unrelated passage on "load regulation" and that the patent never addresses "autonomous identification of incompatibility." Tesla Opp. at 21; Rahn Report ¶¶ 920–31, 946–47. Unicorn replies that the Court "already considered the patent's disclosure when construing the term 'autonomous identification of incompatibility' to mean 'self-determined identification of incompatibility." Unicorn Reply at

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14. Unicorn further argues that "Tesla bears the burden of proving by clear and convincing evidence that autonomous and independent load regulation, as described in the specification, cannot cause the energy storing component to separate." Id.

The Court construed the phrase "autonomous identification of [incompatibility / compatibility] of the [respective] energy storing component with the present supply network" at Claims Construction. See CC Order at 42; ECF No. 170. Unicorn proposed that the phrase should be construed as "self-determined identification of incompatibility [/or compatibility] with the present supply network by the [respective] energy storing component." CC Order at 31. The Court noted, "Unicorn's proposal replaces the word 'autonomous' with 'self-determined' but otherwise only rearranges the words of the claim." Id. The Court found that the proposal was "well supported and will help the jury." In particular, the Court looked to a series of excerpts from the '869 Patent at 8:48–64 to conclude that "self-determine" was an appropriate phrase because the "patent thus discloses that a supply network component (e.g., an energy storing component) may monitor compatibility with the supply network and determine for itself (i.e., self-determine) whether it is safe to connect to the supply network." Id.

Dr. Rahn opines that the patent does not disclose "an autonomous identification of incompatibility" because it does not "disclose an energy storing component evaluating compatibility." Rahn Report ¶ 921-23. Unicorn's argument that this opinion conflicts with the Court's definition of "autonomous" fails. While the Claims Construction Order directly addressed the meaning of "autonomous," the passage did not explicitly address the meaning of "identification of [incompatibility / compatibility]." Instead, the construction simply replaced "autonomous" with "self-determined."

Dr. Rahn also opines that "autonomous . . . load regulation" is disclosed in the patent, but that it does not provide written description for incompatibility because the phrase is ambiguous and may not result in separation from the network medium. Rahn Report ¶ 926. As Unicorn notes, the Court wrote at Claims Construction that the supply network makes a self-determination of "whether it is safe to connect to the supply network" and that "the patent equates this selfdetermination with autonomous interruption of current flow from the energy storing component."

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CC Order at 31–32. But this is not a definition of "identification of incompatibility." The Claims Construction Order only found that the patent equated the self-determination of compatibility with load regulation; the Court did not extract a definition of "identification of incompatibility" from the patent.

Thus, the Court finds that Dr. Rahn's opinion on "autonomous identification of incompatibility" does not conflict with the Claims Construction Order.

Dr. Rahn also takes issue with the "separating/separated" aspect of the autonomous identification limitation. For much of this opinion, Dr. Rahn cites the deposition testimony of the inventor, Johannes Doerndorfer. See Rahn Report ¶¶ 929–31.

Unicorn argues that the testimony Dr. Rahn relies on for this opinion is irrelevant because it discusses improvements the inventor might make today, and that it does not support Dr. Rahn's assertion that the patent fails to disclose the energy storing component making its own determination to separate. Unicorn Mot. at 22. Tesla responds that Dr. Rahn "does not depend on Mr. Doerndorfer's testimony; rather, Dr. Rahn opines that the "[t]estimony from [the] inventor supports my opinions." Tesla Opp. at 22 (citing Rahn Report ¶ 929). Tesla also argues that Dr. Rahn relies on other evidence such as the specification of the patent. *Id.* at 23 (citing Rahn Report  $\P$  920–28, 946–47).

As an initial matter, the Court agrees with Unicorn that testimony about what the inventor would do today is often irrelevant to a written description opinion. Zoltek Corp. v. United States, 815 F.3d 1302, 1308 (Fed. Cir. 2016) (the written description "requirement is applied in the context of the state of knowledge at the time of the invention.") (citation omitted). However, testimony about what you might do "today" might still be relevant if it supports an opinion that a passage from the patent "was an error" at the time. See Rahn Report ¶ 931. Regardless, this is not Tesla's only evidence. Dr. Rahn also relies on other excerpts of Mr. Doerndorfer's testimony regarding written description of the term "separate." See Rahn Report ¶ 930 ("The inventor also confirmed that this passage was 'different' than what was recited in the claim"); Doerndorfer Tr. 127:3–11. Thus, the Court finds that there is relevant evidence in support of Dr. Rahn's opinion.

Unicorn also argues that Tesla fails to address a passage in the patent that it claims

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provides written description. Unicorn Mot. at 22. The specification discloses, "the controlling device [within the energy storing component] is designed in such a way that it separates the functional group from the network medium in the event of a failure of the communication interface." '869 patent at 12:1-5, 20:55-58. Tesla responds that Unicorn's "complaint" "is irrelevant at this stage" because Dr. Rahn provides opinion and evidence to the contrary. The Court agrees with Tesla. It is not the Court's job at summary judgment to weigh the strength of the evidence. Tesla's evidence creates a genuine dispute of material fact as to whether the specification "describe[s] separating from the network."

In sum, Court finds that Tesla's arguments do not fail as a matter of law and thus, Unicorn's motion on this issue is denied.

#### **Enablement** D.

The Court now turns to Unicorn's enablement argument. "Enablement requires that 'the specification teach those in the art to make and use the invention without undue experimentation." Idenix Pharms. LLC v. Gilead Scis. Inc., 941 F.3d 1149, 1154 (Fed. Cir. 2019) (quoting In re Wands, 858 F.2d 731, 737 (Fed. Cir. 1988). "A claim is not enabled when, 'at the effective filing date of the patent, one of ordinary skill in the art could not practice their full scope without undue experimentation." Id. (quoting Wyeth & Cordis Corp. v. Abbott Labs., 720 F.3d 1380, 1384 (Fed. Cir. 2013)). In analyzing undue experimentation, Courts consider the factors first enumerated in *In re Wands*:

- (1) the quantity of experimentation necessary;
- (2) how routine any necessary experimentation is in the relevant field;
- (3) whether the patent discloses specific working examples of the claimed invention;
- (4) the amount of guidance presented in the patent;
- (5) the nature and predictability of the field;
- (6) the level of ordinary skill; and
- (7) the scope of the claimed invention.

*Idenix*, 941 F.3d at 1156; see Wands, 858 F.2d at 737. "[I]t is not necessary that a court review all the Wands factors to find a disclosure enabling." Amgen, Inc. v. Chugai Pharm. Co., 927 F.2d 1200, 1213 (Fed. Cir. 1991). That said, "an expert's opinion on the ultimate legal issue [of enablement] must be supported by something more than a conclusory statement." See In re

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Buchner, 929 F.2d 660, 661 (Fed. Cir. 1991).

Dr. Rahn's report opines that the specification does not enable the same four terms from the previous section, "contact unit," "communication interface," "transport interface," and "energy storing component."

Unicorn argues that Tesla offers only boilerplate conclusory assertions from Dr. Rahn's report as evidence. Unicorn Mot. at 23. Tesla responds that Dr. Rahn opines on some of the Wands factors and describes some of the details from his opinion. Id. (citing Rahn Report ¶¶ 905– 07, 910–12, 915–17, 932, 935).

Before addressing each term individually, the Court begins with a general observation applicable to all four of Dr. Rahn's "Undue Experimentation" opinions. Each of the four sections begins with "My analysis confirms that undue experimentation would be necessary to try to make and use the full scope of this limitation. Specifically, there is no guidance or direction in the specification on how to [recreate the limitation]." Rahn Report ¶ 905 (contact unit), 910 (communication interface), 915 (transport interface), 932 (energy storing component). For each of the four terms, Dr. Rahn does not explain this purported analysis, nor does he address "how routine any necessary experimentation is in the relevant field." Wands, 858 F.2d at 737. The Court agrees with Unicorn that these portions of his four opinions are boilerplate and conclusory. Of course, one boilerplate paragraph does not doom an opinion if there is sufficient detail elsewhere.

The Court now addresses each term in turn. For "contact unit," Dr. Rahn opines that there are "no working examples recited in the specification" because "Each of the examples (e.g., Figures 7 and 8) illustrate a single 'unit.'" Rahn Report ¶¶ 905. However, for the reasons discussed in the previous section, this explanation is at odds with the Court's Claims Construction Order. Finally, Dr. Rahn states that "[t]he breadth of the claims contributes to this undue experimentation, because the Court's construction requires only an 'electrical contact.'" Id. ¶ 907. Missing is any explanation as to what makes the claims broad, and what impact the Court's construction requiring only "electrical contact" has on experimentation. The Court finds that Dr. Rahn's "contact unit" opinion is conclusory and thus fails as a matter of law. Buchner, 929 F.2d

at 661.

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Dr. Rahn's "communication interface" and "transport interface" opinions are nearly identical, and are inadequate for the same reasons. For both, he states that there are no working examples, and specifically that Figure 10 is not a working example. Id. ¶ 911 (for communication interface, Figure 10 illustrates "a communication interface that communicates data to immediately adjacent components"), ¶ 916 (for transport interface he opines that no examples "illustrate a transport interface that transports energy to immediately adjacent components"). For both terms, Dr. Rahn also opines that the patent "does not recite the specific structure in that interface." *Id.* ¶ 912 (communication interface), ¶ 917 (transport interface). The Federal Circuit has made it clear that not all Wands factors must be addressed. Amgen, 927 F.2d at 1213. But Dr. Rahn only opines on what the specification has disclosed and, in a conclusory fashion, that "[t]he breadth of the claims contributes to this undue experimentation." Rahn Report ¶ 911–912, 916–917. Again, missing is any explanation of the claim's breadth or analysis of other factors such as quantity and

routineness of experimentation and guidance in the field. The Court finds that Dr. Rahn's opinion

is conclusory and thus fails as a matter of law. Buchner, 929 F.2d at 661.

Dr. Rahn's energy storing component opinion is much more fulsome. As discussed in the previous section, Dr. Rahn's opinion creates a material dispute of fact as to whether there is sufficient written description in the specification for the term "compatibility." Rahn Report ¶ 919–931. As Dr. Rahn explains, this issue bleeds into enablement because there is no guidance on how to make the self-determination of compatibility. *Id.* ¶¶ 932–936. Thus, Dr. Rahn opines, further experimentation would be necessary to determine "how the 'energy storing component' can make a self-determination of compatibility" and "how to 'separate' the 'energy storing component' from the network in response to this identification of incompatibility." *Id.* ¶ 933. The Court finds that this opinion provides adequate detail and sufficiently addresses the Wands factors such that it does not fail as a matter of law.

Thus, the Court grants Unicorn's motion summary judgment for enablement on the "contact unit," "communication interface," and "transport interface" claim limitations but denies the motion on the "energy story component" limitation.

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### E. Tesla's Affirmative Defenses

Finally, the Court addresses four of Tesla's affirmative defenses challenged by Unicorn in its summary judgment motion.

### 1. Third Affirmative Defense – Prosecution History Estoppel

Tesla's Third Affirmative Defense asserts that "the '869 patent cannot be enforced by Unicorn under the doctrine of prosecution history estoppel." ECF 168 ¶ 63. Unicorn argues that prosecution history estoppel is not an affirmative defense, and relates to claim scope under the doctrine of equivalents, not patent enforceability. Unicorn Mot. at 24. Unicorn adds that Tesla fails to put forth any evidence relating to prosecution history. *Id.* Tesla responds that the defense is relevant because Unicorn is asserted DOE theories, and that Dr. Rahn opines on prosecution history in his report. Tesla Opp. at 25; Rahn Report ¶¶ 80–93.

The passage put forth by Tesla does not contain any opinion related to prosecution history estoppel, and is little more than a broad summary of background facts. Because the summary does not contain any opinion, analysis, or argument, it does not create any dispute of material fact. Accordingly, the Court grants Unicorn's motion for summary judgment on Tesla's prosecution history estoppel affirmative defense.

### 2. § 101 Defense

Tesla's invalidity contentions assert that the claims are directed to the supposed "abstract concept" of connecting/disconnecting in response to an autonomous identification of incompatibility. Tesla's Inv. Cont. at 101. Unicorn argues that Tesla's argument fails both prongs of the *Alice* test. Unicorn Mot. at 25; *see Alice Corp. Pty. Ltd., v. CLS Bank Int'l.,* 573 U.S. 208 (2014). Specifically, Unicorn argues that Dr. Rahn makes no effort to address whether any element of the asserted claims is purportedly 'well-understood, routine and conventional.'" Unicorn Mot. at 25. Tesla responds that Dr. Rahn opined that a number of claim limitations are generic components. Tesla Opp. at 24–25; Rahn Report ¶¶ 63–74, 102–77.

Tesla has not pointed the Court to any evidence, argument, or expert opinion that could support an *Alice* prong 2 argument. Paragraphs 63 to 74 of the Rahn Report cover background information on energy storage systems in general. And paragraphs 102 to 107 simply review the

to background information and clearly not addressed to the issue of inventive concept. This is not enough to defeat summary judgment. This background information creates no dispute of material fact that would support Tesla's argument. Accordingly, the Court grants Unicorn's motion for summary judgment on Tesla's § 101 affirmative defense.

3. Fourth and Ninth Affirmative Defenses

On April 1, 2024, the parties filed a joint motion, "(i) for leave for Tesla to file its Third Amended Answer withdrawing, with prejudice, Tesla's Fourth and Ninth Affirmative Defenses in this case; and (ii) for Unicorn to withdraw (or for the Court to deny as moot) Unicorn's Motion relating to Tesla's Fourth and Ninth Affirmative Defenses." ECF No. 428. The Court granted the joint motion, ECF No. 429, and Unicorn filed a Third Amended Answer. ECF No. 430. As such, the Court denies Unicorn's motion for summary judgment on the Fourth and Ninth Affirmative Defenses as moot.

prior art. Tesla appears to have cobbled together passages from Dr. Rahn's report devoted merely

#### IV. TESLA'S MOTION FOR SUMMARY JUDGMENT

The Court now turns to Tesla's motion. Tesla seeks summary judgment (1) that Unicorn is not entitled to pre-suit damages because it failed to mark embodying products or provide actual notice, Tesla Mot. at 9–14; (2) of no infringement because Unicorn offers no viable infringement theory, *id.* at 14–22; (3) no infringement by all accused products for failure to meet the "transport interface" limitation. *Id.* at 23–25. The Court addresses these three issues in turn.

### A. Pre-Suit Damages

The first issue is whether Unicorn is not entitled to pre-suit damages because, as Tesla contends, it failed to mark two products that practice the asserted patent that Unicorn imported into the United States. The Court first addresses the applicable standard (pleading or summary judgment), then whether Unicorn provided notice through marking or actual notice, then the scope of pre-suit damages.

### 1. The Court is Required to Apply the Rule 56 Standard

Tesla argues that Unicorn fails to plead compliance with § 287 in its amended complaint.

Tesla Mot. at 9. Unicorn responds with three arguments. First, Unicorn argues that the amended

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complaint "alleges willful infringement, which is enough to satisfy the minimal pleading standard for marking." Unicorn Opp. at 6 (internal quotations omitted). Second, Unicorn argues that Tesla "has filed this motion under Rule 56, replete with evidence outside the pleadings themselves" and thus, "the Court is required to look past the four-corners of the pleadings and address the merits." *Id.* at 7. Finally, Unicorn argues that even if it did not adequately plead pre-suit damages, leave to amend should be granted under Rule 15. *Id.* at 7–9. Neither party addresses amendment under Rule 16.

The Court need only address Unicorn's second argument, that the Court should examine the evidence and address the merits. "[W]hen the parties have 'briefed and argued summary judgment, . . . judicial efficiency [is] best served by dealing directly with those arguments rather than avoiding them." Jones v. L.A. Cent. Plaza LLC, 74 F.4th 1053, 1061 (9th Cir. 2023) (quoting Rios-Campbell v. U.S. Dep't of Com., 927 F.3d 21, 25 (1st Cir. 2019)). "In the ordinary case, there is 'no justification for allowing a district court to travel back in time and train the lens of its inquiry on the bare allegations of the complaint while disregarding the compiled factual record upon which a summary judgment movant has elected to rely." Id. (quoting Rios-Campbell, 927 F.3d at 26).

Here, the parties have briefed and argued summary judgment, and Tesla has not argued that any "specific circumstance[] of this case warrants departing from these general principles." See id. Nor has Tesla suggested any prejudice from a possible pleading deficiency. Thus, the Court finds it appropriate to apply the summary judgment standard. Because the Court finds for Unicorn on its second argument, the Court need not address its first and third arguments (whether Unicorn sufficiently pled marking or could amend).

#### 2. Unicorn Did Not Provide Notice

The Court next addresses notice. Title 35 U.S.C. § 287 provides a limitation on damages if a patentee or its licensees sells or imports patented products without giving "notice to the public." There are two ways a patentee can provide notice: (1) actual notice; and (2) constructive notice. 35 U.S.C. § 287. Actual notice requires the patentee to provide "written notification" of infringement. *Id.* In the absence of actual notice, a patentee can show constructive notice if it has

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marked patented articles (its own and those sold by licensees) with numbers of each patent that product practices. Arctic Cat Inc. v. Bombardier Recreational Prods. Inc., 876 F.3d 1350, 1365-67 (Fed. Cir. 2017) ("Arctic Cat I"). The Court addresses constructive notice, then actual notice.

### a. Constructive Notice - Marking

"The patentee bears the burden of pleading and proving he complied with § 287(a)'s marking requirement." Id. at 1366 (citation omitted). An "alleged infringer who challenges the patentee's compliance with § 287 bears an initial burden of production to articulate the products it believes are unmarked 'patented articles' subject to § 287." Id. at 1368. This initial burden is a "low bar," and the alleged infringer "need only put the patentee on notice that he or his authorized licensees sold specific unmarked products which the alleged infringer believes practice the patent." Id. "Once the alleged infringer meets its burden of production, however, the patentee bears the burden to prove the products identified do not practice the patented invention." *Id.* Where the patentee fails to present evidence of compliance with the statute, summary judgment is appropriate. See, e.g., Unwired Planet, LLC v. Apple Inc., 2017 WL 1175379, at \*5 (N.D. Cal. Feb. 14, 2017) (granting summary judgment of no pre-suit damages because plaintiff "ha[d]n't responded with evidence that it complied [with the marking statute], nor ha[d] it pointed to another form of pre-suit notice").

Tesla argues that Unicorn imported two EnergyTube products (the "Zais EnergyTubes") by bringing them to the United States to give to a third-party, the Zais Group. Tesla Mot. at 2. Unicorn responds that it did not import the EnergyTubes, under the meaning of the patent statute, and that the Zais EnergyTubes do not practice the claims because they are missing hardware critical to their functionality. Unicorn Opp. at 9–13.

Several issues are not disputed. It is undisputed that Unicorn brought the Zais EnergyTubes to the United States and gave them to Zais. ECF No. 375-13 ("Zugel Tr."). The parties also do not dispute that Tesla has met the "initial burden of production" required by § 287 for the Zais EnergyTubes. See Tesla Reply at 10. Finally, the parties do not dispute that Unicorn did not mark the Zais EnergyTubes. Tesla Mot. at 11; ECF No. 375-11; Unicorn Opp. at 8 ("Unicorn reasonably believed it had nothing to mark").

Thus, whether Unicorn was required to give constructive notice resolves to two discrete issues: 1) whether the Zais EnergyTubes were "imported" under the meaning of § 287; and 2) whether the Zais EnergyTubes practice the '869 Patent.

### i. Unicorn Imported the Zais Tubes

The parties offer competing district court cases that analyze what it means to import a product under the related patent statute 35 U.S.C. § 271(a). Unicorn cites to three district courts that found that bringing a product to the United States alone was not importation. Unicorn Opp. at 12; *Synqor, Inc. v. Cisco Sys.*, 2014 WL 12641603, at \*8 (E.D. Tex. Aug. 11, 2014) (shipments passing through the United States "in transit from one foreign country to another foreign country" without clearing customs are not imports "without evidence the shipments were for commercial purposes or were for purposes of sale."); *Cybiotronics, Ltd. v. Golden Source Elecs., Ltd.*, 130 F. Supp. 2d 1152, 1176 (C.D. Cal. 2001) ("Smoothline's shipments of samples for approval or testing were not for purposes of any direct commercial benefit, nor were they items that were being transmitted for purposes of sale. There is therefore no basis for concluding that these alone were 'imports into the United States.'"); *Black & Decker, Inc. v. Shanghai Xing Te Hao Indus. Co.*, 2003 WL 21383325, \*3 (N.D. Ill. 2003) (no importation under statute where product was brought into U.S. solely for display at trade show).

Tesla counters with the more recent *Largan* case, where the court wrote that *Cybiotronic's* "conclusion that importation occurs only when a product is brought into the United States for commercial benefit is not well taken," and instead found that "the plain text of section 271(a) does not contemplate such limitations" but instead that "importation simply means '[t]he bringing of goods into a country from another country." *Largan Precision Co, Ltd v. Genius Elec. Optical Co.*, 86 F. Supp. 3d 1105, 1115–16 (N.D. Cal. 2015), *aff'd*, 646 F. App'x 946 (Fed. Cir. 2016) (quoting Black's Law Dictionary 824 (9th ed.2009)); *see also id.* (collecting cases).

The Court finds *Largan* persuasive. The plain text of § 287 and § 271 say nothing about intent to sell being a predicate to importation. *Athena Feminine Techs. Inc. v. Wilkes*, C 10–04868 SBA, 2011 WL 4079927, at \*4 (N.D. Cal. 2011) ("Under the plain terms of § 271(a), the act of importation, standing alone, is sufficient to state a claim for direct infringement."); *see also* 

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Canton R.R. Co. v. Rogan, 340 U.S. 511, 515 (1951) ("to import means to bring into the country"); Cunard Steamship Co. v. Mellon, 262 U.S. 100, 122 (1923) ("Importation . . . consists in bringing an article into a country from the outside."). Moreover, the legislative history "does not establish that Congress clearly intended 'importation' in § 271(g) to mean conduct or activity other than that which the plain meaning of the term implies" nor did it "intend the term 'importation' to turn upon extremely intricate concepts of title and sales contracts." Bristol-Myers Co. v. Erbamont Inc., 723 F. Supp. 1038, 1042–43 (D. Del. 1989).

Applying Largan's interpretation of the term "import" to the facts of this case, it is undisputed that Unicorn imported the Zais EnergyTubes. Tesla has provided evidence, undisputed by Unicorn, that Unicorn brought two EnergyTubes to New Jersey in 2019. See Zugel Tr. 57:10-24 (testifying that Unicorn brought the EnergyTubes to Zais offices in Holmdel, New Jersey in 2019); ECF No. 375-11 (pictures of the imported unmarked Zais EnergyTubes). Thus, the Court finds that it is undisputed that Unicorn imported the EnergyTubes into the United States.

Even if the Court applies Cybiotronics instead of Largan, Unicorn still indisputably imported the Zais EnergyTubes into the U.S. for a commercial purpose. See Tesla Reply at 5–6. Unicorn presents evidence that it had no customers in the United States and that it did not have approval from Underwriters Laboratories ("UL") to use the EnergyTubes on the U.S. power grid. ECF No. 375-10 ("Friederich Dep.") 209:5-10 ("Has Unicorn ever offered its product for sale to a customer that Unicorn knew was in the United States? . . . [A.] To my knowledge, there is no customer of Unicorn in the United States."); id. 212:14–25; ECF No. 423-2 ("Heinemann Dep.") 189:7–10 ("[P]roduct was not already fully functioning, operable, and also not exportable to the U.S. because of a lack of approval."). But Tesla replies with substantial evidence that the import was for commercial purposes and purposes of a sale. Heinemann Dep. 191:13–18 (testifying that EnergyTubes were presented "during the process of Unicorn trying to solicit an investment"); ECF No. 375-6 at -52 to -57 (details of the EnergyTube). After the meeting, Zais asked "to buy 48 EnergyTubes" and Unicorn and Zais discussed sending them to Zais founder Christian Zugel's farm in New Jersey. ECF No. 375-7 at -752; ECF No. 375-8 at -814. Especially in light of Tesla's evidence that the Zais EnergyTubes were brought to the United States in connection with

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potential future investment and future sales to Zais, Unicorn's evidence that Unicorn has no customer in the United States and that the EnergyTube had not at the time been approved by UL creates no dispute of fact about whether Unicorn brought the EnergyTubes into the U.S. for commercial purposes. Cybiotronics, 130 F. Supp. 2d at 1176.

Thus, the undisputed evidence shows that Unicorn imported the Zais EnergyTubes into the United States.

#### ii. The Zais EnergyTubes Practice the Asserted Patent

The next question is whether the imported Zais EnergyTubes practice the asserted patent. Unicorn contends that the "souvenir tubes as provided to ZAIS were not operative" because they "lacked at least two required components, an Energy Tube Adapter ('ETA') and a 'close cap,' without which the [ZAIS] Energy Tubes could not be activated and could not practice the claims." Unicorn Opp. at 10 (citations and quotation omitted); Herniter Report ¶ 1126–27, 1134; ECF No. 405-7 ("Unicorn Resp. to Tesla Interrog.") at 21 (tubes cannot operate "[w]ithout the presence of [a] 'close cap'").

Tesla argues in response that "Unicorn did not disclose this argument in discovery, and therefore it should be disregarded." Tesla Mot. at 13. Tesla alternatively argues that "Unicorn and Dr. Herniter previously asserted that the EnergyTube—by itself—satisfies the claim limitations of the '869 patent, without any of the external accessories later identified by Dr. Herniter" and that "Dr. Rahn, confirmed that the Zais EnergyTubes were identical in every measurable respect to the EnergyTubes that Unicorn and Dr. Herniter agree practice the '869 patent." Id. (emphasis in original). Tesla also notes that Unicorn itself claimed in its infringement contentions that the EnergyTubes practice the asserted patent. ECF No. 279-1 at 5 ("Unicorn Energy identifies its EnergyTube and EnergyCube products with respect to at least claims 1–3, 5, 7, 9, 10, 19, 24, 26, 27, and 28 of the '869 patent as apparatus that incorporate or reflect each enumerated claim").

Unicorn argues that despite its infringement contentions, the two Zais EnergyTubes at issue did not practice the patent, because they were not operative without the "close cap" and "ETA." Unicorn Opp. at 10. Unicorn first argues that "[w]ithout the 'close cap,' the souvenir

tubes were not 'configured to exchange information,' and were incapable of doing so, and thus could not practice the claims. *Id.* (quoting Herniter Report ¶ 1134). Unicorn also argues that "[w]ithout the close cap, the tubes also could not be 'separated' or 'switched on.'" *Id.* (quoting Unicorn Resp. to Tesla Interrog. at 21); Herniter Report ¶ 1127. Unicorn also argues that "the Energy Tubes also require an Energy Tube Adapter or ETA to communicate and operate." *Id.* at 11 (citing Herniter Report ¶ 1128); Unicorn Resp. to Tesla Interrog. at 21 (ETA "also is required for tubes to communicate and operate."). Unicorn adds that "the ETA not only must be present, but must be used with other external hardware to activate the tubes by providing an external voltage, in order for the tube to be 'configured to exchange information' or to switch on/separate." *Id.* (quoting Herniter ¶¶ 1130, 1131) (in the absence of activation using ETA "the tubes will not communicate or operate.").

Tesla replies that neither is needed to meet the claim limitations and that the functionality is already present in the underlying software of the imported EnergyTubes, which is by itself sufficient to satisfy the claims. Tesla Reply at 7–8.

On the question of whether the imported Zais EnergyTubes were operational, Unicorn has presented evidence of inoperability. Unicorn puts forth evidence that in the absence of a close cap, the Energy Tube cannot charge or discharge. Weis Dep. Tr. (8/31/23) 167:9–11 ("When there is no closed [sic] cap we also open everything and wait until there is a closed cap."); Herniter Report ¶ 1127. Unicorn puts forth evidence that the Energy Tubes also require an ETA to communicate and operate. Herniter Report ¶ 1128, 1130, 1131 (in the absence of activation using ETA "the tubes will not communicate or operate."); *see also* Unicorn Resp. to Tesla Interrog. at 21 (ETA "also is required for tubes to communicate and operate."). And Unicorn puts forth evidence that ZAIS did not receive any close caps or ETAs. ECF No. 404-3 (Zugel Dep.) 71:20–22 (nothing received alongside tubes); ECF No. 405-10 at 10. However, that evidence is not material to the question at hand.

The critical issue is not whether the imported Zais EnergyTubes were fully functional, but whether the claims "recite[] capability and not actual operation," *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1204 (Fed. Cir. 2010), and if so, whether the Zais EnergyTubes were

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capable of operation. When the claims require an apparatus capable of performing the claimed
functionality, a practicing product need not actually perform the patent, but need only be capable
of performing the claimed function without reprogramming or reconfiguration. <i>Id.</i> ("[T]o infringe
a claim that recites capability and not actual operation, an accused device 'need only be capable of
operating' in the described mode.") (quoting Intel Corp. v. U.S. Int'l Trade Comm'n, 946 F.2d
821, 832 (Fed. Cir. 1991)); see also Hilgraeve Corp. v. Symantec Corp., 265 F.3d 1336, 1343
(Fed. Cir. 2001). An invention that is "configured to" infringe the patent is capable of performing
the recited functionality. See TQ Delta LLC v. Adtran, Inc., No. CV 14-954-RGA, 2021 WL
1200595, at *6 (D. Del. Mar. 30, 2021) ("Like in Finjan, the Asserted Claims also recite
capability in that they are 'configured to' or 'configurable to' perform certain functions
[N]othing in the claim language here indicates that the functions provided in the source code
need to be 'active' in order to meet the claim limitation[.]").

Here, the independent claims (1 and 27) require that a practicing product be "configured to cooperate with the communications interface . . .," which the Court construed as "configured to exchange information with the communication interface such that [the energy storing component]" is either "separated" or "switched on" (as appropriate). ECF No. 169 at 23 (emphasis added). Because the device needs only to be configured to exchange information, it recites capability and not actual operation. Thus, a practicing device "need only be capable of operating in the described mode." Finjan, 626 F.3d at 1204; TQ Delta, 2021 WL 1200595, at \*6. The Court therefore need only determine whether the imported Zais EnergyTubes are capable of practicing (e.g., configured to practice) the limitation.

According to even Unicorn's expert, the EnergyTubes are configured to practice the limitations. In his report, Unicorn's expert Dr. Herniter opines, "[t]he EnergyTube has control circuitry [that is] 'configured to cooperate with the communications interface'" Herniter Report ¶ 1124 (quoting '869 Patent). Specifically, he writes:

> The EnergyTube is configured to cooperate with the communication interface. It uses the MOSFET switches to separate from the network medium and is programmed to separate the energy storing component from the network medium in response to an autonomous identification of incompatibility of the energy storing component with

the present supply network based on the monitoring of internal and external information, including regarding the supply network obtained from the communication interface.

*Id.* (emphasis added). Thus, because the EnergyTube is configured to (i.e., capable of) practicing the asserted claims, the undisputed evidence shows that the imported Zais EnergyTubes practiced the asserted patent even without the close cap and ETA.

Finally, Tesla argues that "Unicorn also did not disclose its argument about missing external accessories until after close of business on the last day of fact discovery." Tesla Reply at 4; *see* ECF No. 375-15 at 21. This issue is not sufficiently briefed, and the Court need not address it. To the extent that this is still a live issue at trial, Tesla may seek to exclude this evidence through a motion *in limine*.

#### b. Actual Notice

Finally, it is undisputed that Unicorn did not provide Tesla actual notice until it filed the complaint on October 26, 2020. ECF No. 1 (Compl.); Tesla Mot. at 10; Unicorn Opp. at 14; Friederich Dep. 218:13–18 ("Q. Did Unicorn provide Tesla with any type of notice prior to filing suit? A. To my knowledge, we have not provided this to Tesla.") (objections omitted). Thus, the Court finds that it is undisputed that Tesla was not provided actual notice of infringement until Unicorn filed suit on October 26, 2020.

#### 3. Scope of Pre-Suit Damages

The Court must now evaluate the extent to which pre-suit damages are unavailable to Unicorn due to its failure to mark or give actual notice. The parties do not dispute that, upon a finding that Unicorn failed to provide notice, it would not be entitled to damages from the date of the import in 2019 to the date it filed the lawsuit in 2020. *See* Unicorn Opp. at 14. However, the parties dispute whether Unicorn is entitled to damages for the time period prior to import.

This disagreement mirrors a split in the district courts not yet resolved by the Federal Circuit. Tesla points to *Team Worldwide Corp. v. Acad., Ltd*, where the court found that § 287 "prohibits a patentee from receiving *any* damages in a subsequent action for infringement after a failure to mark." 2021 WL 1854302, \*1 (E.D. Tex. May 10, 2021), *adopted* 2021 WL 1985688 (E.D. Tex. May 18, 2021) (quoting *Arctic Cat Inc. v. Bombardier Recreational Products Inc.*, 950

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F.3d 860 (Fed. Cir. 2020) ("Arctic Cat II")). The court's explanation was twofold. First, the court
found that in Arctic Cat II, "the Federal Circuit strictly interpreted § 287 to make clear that once a
patentee (or its licensee) is non-compliant with § 287, recovery of damages is limited to either the
period after marking resumes or after the alleged infringer has been given actual notice." <i>Id.</i> at 2
(quoting Arctic Cat II, 950 F.3d at 864). Second, the court wrote that "the Federal Circuit is
concerned not only with properly interpreting the § 287 statute but also effectuating the underlying
policy" of "informing the public and possible infringers that the article is patented." <i>Id.</i> (internal
quotations omitted).

Unicorn points to Arendi S.A.R.L. v. LG Elecs., Inc., which held that the patentee is not precluded from recovering damages for the period *before* the marking obligations are triggered. 2022 WL 22400977, at \*8 (D. Del. Apr. 8, 2022). There, the court disagreed with Team Worldwide, writing that "Arctic Cat II addresses a situation 'after a [patentee's] failure to mark." *Id.* (quoting *Arctic Cat II*, 950 F.3d at 865) (emphasis added).

Having considered the different outcomes in *Team Worldwide* and *Arendi*, the Court's analysis begins with the statute. Reading Law, Scalia and Garner, p. 56 (2012 edition). Section 287 provides that:

> in the event of failure so to mark, no damages shall be recovered by the patentee in any action for infringement, except on proof that the infringer was notified of the infringement and continued to infringe thereafter, in which event damages may be recovered only for infringement occurring after such notice.

35 U.S.C. § 287 (emphasis added). A plain reading of § 287 would bar *all* recovery of damages until notice is given.

Arctic Cat II supports the plain reading of the statute. There, the court held that § 287 "prohibits a patentee from receiving any damages in a subsequent action for infringement after a failure to mark." Arctic Cat II, 950 F.3d at 865 (emphasis in original). It further held that "a patentee who begins selling unmarked products can cure noncompliance with the notice requirement—and thus begin recovering damages—by beginning to mark its products in accordance with the statute." Id. at 864 (citing Am. Med. Sys., Inc. v. Med. Eng'g Corp., 6 F.3d 1523, 1537 (Fed. Cir. 1993)). The court explained:

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The notice requirement to which a patentee is subjected cannot be switched on and off as the patentee or licensee starts and stops making or selling its product. After all, even after a patentee ceases sales of unmarked products, nothing precludes the patentee from resuming sales or authorizing a licensee to do so. In the meantime, unmarked products remain on the market, incorrectly indicating to the public that there is no patent, while no corrective action has been taken by the patentee.

Id. at 865. Arctic Cat II does not explicitly address whether the notice requirement reaches back to bar damages for the time period before a patentee began making and selling a patented article. But critically, it does not suggest that the notice requirement is only forward looking. In fact, it is much simpler. Arctic Cat II classifies patentees as those who make or sell a patented article (and are thus subject to the statute) and those who don't. *Id.* at 864 ("[t]he notice provisions of § 287 do not apply . . . when a patentee *never* makes or sells a patented article") (emphasis added); *id.* at 865 ("[t]he notice requirement . . . cannot be switched on and off . . . . "). It also holds that patentees subject to the statute "cannot recover damages" without notice. id. at 866 ("The clear meaning of this section is that the patentee or his assignee, if he makes or sells the article patented, cannot recover damages against infringers of the patent, unless he has given notice") (quoting Dunlap v. Schofield, 152 U.S. 244, 247 (1894)). Thus, because Unicorn "makes or sells" a patented article (by importing the EnergyTubes), it "cannot recover damages" prior to when it gave Tesla notice. Id. at 866.

The Court recognizes that this is a harsh remedy, especially in a case like this where the import occurred several years after the patent was issued and only one year before suit was filed. However, this outcome is the clear consequence of Congress's decision "to incentivize marking of patented articles." See Team Worldwide, 2021 WL 1854302, at \*1. Furthermore, harsh damages caps are not limited to patent law. See Derek Andrew, Inc. v. Poof Apparel Corp., 528 F.3d 696, 699–700 (9th Cir. 2008) (precluding recovery statutory damages under the Copyright Act for failure to register). That a penalty is harsh is not a sufficient reason to ignore clear text and binding appellate authority requiring its application.

Thus, the Court finds that Unicorn is not entitled to damages from the time period prior to October 26, 2020, when it gave Tesla actual notice.

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#### B. No Showing of Infringement

The Court now turns to the second part of Tesla's motion for summary judgment addressing no infringement of several accused products. Tesla argues summary judgment should be granted because Unicorn only "relies on theories that were not disclosed in Unicorn's operative infringement contentions, including theories that the Court expressly disallowed from Unicorn's infringement contentions." Tesla Mot. at 14. Tesla's arguments concern four classes of accused products. The Court addresses the first product, the Megapack 2, then the remaining products together.

#### 1. Megapack 2

Tesla argues that "[s]ummary judgment of no infringement for Megapack 2 is appropriate because Unicorn cannot meet its burden to show that Megapack 2 infringes the 'gateway,' 'switch,' and 'communication interface' claim limitations of independent claims 1 and 27 of the '869 patent." Tesla Mot. at 15. The reason Unicorn cannot meet its burden, according to Tesla, is that the only theories put forth in Unicorn's expert reports have been disallowed. The Court addresses these three claim limitations in turn.

#### a. Gateway

Tesla argues that "[t]he totality of Dr. Herniter's opinions regarding Megapack 2's alleged infringement of the 'gateway' limitation is contained in paragraph 933 of his report" where he opines that "'[t]he is the gateway' for Megapack 2 and offers *no alternative* infringement opinions—literal or DOE." Tesla Mot. at 15 (quoting Herniter Report ¶ 933). Tesla argues that this sole theory was the subject of Unicorn's motion to amend its infringement contentions, which the Court granted in part and denied in part. *Id.* Unicorn responds by pointing to other parts of Dr. Herniter's report that purportedly describe how a "power electronics device" practices the claim limitation. Unicorn Opp. at 15; Herniter Report ¶¶ 474, 933.

The asserted claims require at least one "gateway for coupling the at least one contact unit with the energy store." '869 patent at claims 1, 27. The Court construed this term as "coupler that serves as a connection between the at least one contact unit and the energy store." ECF No. 169 at 19.

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Judge van Keulen found that the Megapack 2 theory disclosed in Unicorn's proposed First
Amended Infringement Contentions was an impermissible new theory and that Unicorn could
have moved to compel the information required to assert this theory earlier had it acted diligently.
Specifically, she found:

With regards to the Megapack 2 , I looked carefully at this, again at the parties' respective arguments, at how the contentions were originally and what the proposed amendments are, and we are – it does appear that this is a new theory, and that it's instead of just the DC/DC main or mapping to the DC/DC converter. The fact that it was – an mapped in another product does miss the point, in that it's not been in these allegations, and, again, the documents could have been produced, could have been compelled for production sooner, and there may even be an argument that the documents that were produced in 2021 certainly addressed Megapack 2 and reflected an if that wasn't enough, Unicorn could have followed up, if it wanted to include that line of its infringement theory.

Nov. 14 Hr'g Tr. 47:16–48:6. Judge van Keulen also found that "prejudice weighs very heavy in this case because of where we are in the case." *Id.* 45:23–24.

Paragraph 933 of Dr. Herniter's report clearly relies on this disallowed theory. Compare ECF No. 279-1 at 103 (not allowing amendment to add "Good of Megapack 2 . . . that is a gateway . . . ") with Herniter Report ¶ 933 (" is the gateway . . . "). More importantly, any opinion relating to "mapping to the instead of just the DC/DC main or DC/DC converter" was a "new theory" that Judge van Keulen disallowed. Nov. 14 Hr'g Tr. 47:20–22. Thus, Unicorn cannot rely on paragraph 933 of Dr. Herniter's report in support of infringement.

Unicorn points to an operative disclosure about "power electronics" for this theory. Dr. Herniter opined in his report that "[t]he energy storage components have a battery connected to a where the power electronics device couples the energy store with the energy network." Herniter Report ¶ 474 (emphasis added). Unicorn argues that the disallowed infringement contention was not the only basis for this theory, but that Unicorn "employed a belt-and-suspenders approach, seeking to supplement its contentions with additional evidence that aligned with discovery received near the close of fact discovery."

Unicorn Opp. at 15. Unicorn claims that two passages in its operative infringement contentions

expressly disclose this theory.
As an initial matter, Unicorn's arguments that the theory was disclosed are
an improper attempt to seek reconsideration. Judge van Keulen considered Unicorn's
theory arguments, including Unicorn's "power electronics" arguments. Nov. 7 Hr'g Tr.
94:19–96:5, 114:15–118:8; Nov. 14 Hr'g Tr. 24:1–32:16. She then denied the motion for leave to
amend to add the theory, because she found that Unicorn did not properly
disclose it. Nov. 14 Hr'g Tr. 47:20–22.
The Court nonetheless addresses Unicorn's argument. Unicorn contends that two excerpts
form the basis of its theory. First, the operative contentions disclose that
" ECF No. 279-1 at 104. Second, eighteen pages later, in the
section on the "switch" limitation, the contentions explain that in Tesla's power electronics
implementation, "can
"enable/disable power conversion." See id. at 122 (emphasis added). But this purported
disclosure is problematic. First, the "passage refers to
, which is at odds with Dr. Herniter's opinion that the Megapack 2 has an
Compare ECF No. 279-1 at 104 ("
.") with
Herniter Report ¶ 937 ("As explained in Section IX.B. and VIII.G, the
."); see also id. ¶ 446 ("
"). Furthermore, the
passage is disclosed 18 pages later in the "switch" limitation section (not the
gateway limitation section). These two disclosures are far too tenuous. Thus, the Court finds that
Unicorn's operative contentions do not disclose an theory.
Unicorn also cites the testimony of Tesla employees discussing evidence about how the
for the Megapack 2. ECF No. 405-9 (Gomm Dep.)
148:19–149:6; ECF No. 405-11 (Ozbek Dep.) at 18:16–19:19, 22:2–4, 23:22–24:6. But this

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evidence is of little use to Unicorn because it did not disclose the	theory
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Unicorn's alternative disclosure cannot form the basis for its infringement theory. The Court thus finds that Unicorn's only evidence of the Megapack 2 practicing the "gateway" limitation is based on an improperly disclosed theory. Accordingly, the Court finds that Unicorn has not presented a genuine dispute of material fact as to whether the Megapack 2 practices the "gateway" limitation, and Tesla's motion is granted on this issue.

#### b. Switch

The asserted claims require at least one "switch for separating the energy store from the network medium." '869 patent at claims 1, 27. Dr. Herniter opines that the Megapack 2 literally infringes the limitation because the "grant is a switch." Herniter Report ¶ 948. Dr. Herniter also opines that Megapack 2 infringes under DOE because "

that functions like a switch . . . ." *Id.* ¶¶ 952–55.

Once again, disclosure of this theory was already addressed by Judge van Keulen, who denied Unicorn's motion for leave to amend to add this theory to its infringement contentions. See ECF No. 279-1 (denying leave to amend to add the following theory: "In the Megapack 2 and Megapack 2 XL, each energy storing component has at least that is the claimed switch.").

Unicorn's argument also fails for the same reason as its "gateway" arguments. Unicorn

again argues that that its infringement contentions discuss " . See Unicorn Opp. at 17–18 (making the same argument). But as described in the previous subsection, Unicorn did not disclose a theory where the Megapack 2 uses an Thus, the Court finds that Unicorn has not presented a genuine dispute of material fact as to whether the Megapack 2 literally practices the "switch" limitation, and Tesla's motion is granted on this issue.

The DOE theory is also not properly disclosed. Again, this issue was already addressed by Judge van Keulen, who denied Unicorn's motion for leave to amend to add this theory to its infringement contentions. See ECF No. 279-1, at 131-32 (denying leave to amend to add "(or

Nonetheless, Unicorn argues that "even if the Court disagrees that Unicorn can refer to the
Megapack 2's as an 's should still be permitted to demonstrate
at trial that the Megapack 2 includes a 'power electronics' that meets the 'switch' limitation,
literally and under the doctrine of equivalents." Unicorn Opp. at 19. The Court disagrees.
Unicorn's DOE theory explicitly disclosed only a "theory. ECF No. 279-1, at
131. Unicorn cannot now use the doctrine of equivalents as a workaround to include undisclosed
and explicitly disallowed theories. Accordingly, the Court finds that Unicorn has not presented a
genuine dispute of material fact as to whether the Megapack 2 practices the "switch" limitation
under the doctrine of equivalents, and Tesla's motion is granted on this issue.

#### c. Communication Interface

The asserted claims require "a communication interface for communicating with a further energy storing component." '869 patent at Claims 1, 27. Dr. Herniter opines that the Megapack 2 infringes both literally and under the doctrine of equivalents. The Court addresses both opinions.

### i. Literal Infringement

Dr. Herniter opines that Megapack 2 literally infringes because "
is its 'communications interface.'" Herniter Report ¶ 936.

Tesla argues that this theory is disallowed because it relies on an ethernet theory that Unicorn sought to add to its infringement contentions, but the Court rejected because it was a new theory. Tesla Mot. at 16–17. Unicorn responds that its operative infringement contentions disclose the theory that the Megapack 2 communication interface is electrical contact(s) on the and that it was not obligated to disclose the specific protocol for communications in its contentions. Unicorn Opp. at 20; *see* ECF No. 279-1 at 106–107 (disclosing a "communications output connection" which "compris[es] the . . . communication interface [ ] of the contact unit.").

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1	that could have been discovered in this case over the years." <i>Id.</i> 77:19–78:4. The Court
2	also denied Unicorn's motion for relief from Judge van Keulen's order as it pertained to disclosure
3	of ECF No. 307 at 5.
4	Unicorn argues that it disclosed the more general "electrical contact" and that Dr. Herniter
5	just fills in the gaps by specifying that is the particular type of electrical contact.
6	Specifically, Unicorn argues that the operative infringement contentions state that the Megapack
7	energy storing components, i.e.,
8	which "compris[es] the communication interface [ ] of the contact unit." ECF
9	No. 279-1 at 107 (emphasis added; citation to Tesla document omitted); see also id. at 106 ("Each
10	Megapack energy storing component has a contact unit (i.e., 'electrical contact(s) ) that
11	includes a communication interface that communicates with a further energy storing component").
12	Unicorn also argues that Dr. Herniter's report specifies the particular type of
13	(electrical contact(s)) used in the Megapack 2,
14	Report ¶ 936.
15	This is nothing more than an end-run around Judge van Keulen's order. The Court
16	previously found that Unicorn failed to timely disclose the theory and is thus precluded
17	from using it as evidence. Unicorn now wants the Court to ignore that was disallowed,
18	allow an "electric contact" theory, and then let Unicorn specify that the disclosed "electrical
19	contact" happens to be This is not, as Unicorn contends, "application of a disclosed
20	theory," Unicorn Opp. at 20 (citation omitted), it is an improper request for reconsideration.
21	The Court thus finds that Unicorn's only evidence that the Megapack 2 practices the
22	"communication interface" limitation was disallowed by the Court. Accordingly, the Court finds
23	that Unicorn has not presented a genuine dispute of material fact as to whether the Megapack 2
24	literally practices the "communication interface" limitation, and Tesla's motion is granted on this
25	issue.
26	ii. Doctrine of Equivalents

Dr. Herniter's first opinion asserts that Megapack 2 infringes under DOE because "information is

Dr. Herniter also offers two DOE opinions for the "communication interface" limitation.

communicated electronically by the "Herniter Report ¶¶
938-40 (emphasis added). Tesla argues that this DOE opinion was not disclosed in Unicorn's
contentions (see ECF No. 279-1 at 131–33), and it relies on the same underlying "theory
that the Court previously disallowed. Unicorn responds that "[t]he only difference between Dr.
Herniter's testimony and Unicorn's infringement contentions is the stated <i>example</i> of an
connection—which is one type of electrical contact." Unicorn Opp. at 21 (emphasis in original).
Unicorn's argument fails for the same reason as its literal infringement argument.
Unicorn's operative contentions disclose:
Each energy storing component has at least one electrical contact for communications and at least one electrical contact for transporting electrical energy. The Megapack performs this function in the same way because information is communicated electronically by the energy storing component via an electrical contact, for example in a
ECF No. 279-1 at 115 (emphasis added). Again, Unicorn argues that Dr. Herniter provides
as an example of the electrical contact in his report. But for the reasons described in the
previous subsection, the Court cannot permit Unicorn to specify that the disclosed "electrical
contact" happens to be in light of Judge van Keulen's denying amendment to add the
theory. Nov. 7 Hr'g Tr. 66:3–67:2, 77:19–78:4; see also ECF No. 307 at 5.
Dr. Herniter's second DOE opinion claims that Megapack 2 infringes because
." Herniter Report ¶¶ 941–44. Tesla argues that the Court
expressly denied Unicorn's request to add this exact DOE argument to its contentions, ECF No.
279-1 at 114. Unicorn does not directly address this argument.
Nor could it. As Tesla notes, and Unicorn does not dispute, this theory was disallowed by
Judge van Keulen. ECF No. 279-1 at 114 (denying amendment to add "[
").
Accordingly, the Court finds that Unicorn has not presented a genuine dispute of material

fact as to whether the Megapack 2 practices the "communication interface" limitation under the doctrine of equivalents, and Tesla's motion is granted on this issue.

### 2. Megapack 1, Powerpack, and Powerwall 2 AC

Tesla argues that summary judgment of no infringement for Megapack 1, Powerpacks 1, 1.5, 2, and 2.5 ("Powerpack"), and Powerwall 2 AC ("Powerwall") is also appropriate because Unicorn cannot meet its burden to show that these accused products infringe the "communication interface" limitation of independent claims 1 and 27 of the '869 patent. Tesla Mot. at 17–20 (Megapack 1), 20–21 (Powerpack), 21–22 (Powerwall). Unicorn responds that it disclosed each of the theories in its infringement contentions. Unicorn Opp. at 21–23. Unicorn's expert Dr. Herniter opines on both literal infringement and DOE infringement theories, which the Court addresses in turn.

#### a. Literal Infringement

The Court first addresses Dr. Herniter's opinions on literal infringement of the "communication interface." Herniter Report ¶¶ 853–54 (Megapack 1), 751–56 (Powerpack), 1043–46 (Powerwall). Two infringement theories apply to each of the three classes of accused products, (1) *indirect communication* from \_\_\_\_\_\_\_\_, and (2) *direct communication* from \_\_\_\_\_\_\_\_, For direct communication, \_\_\_\_\_\_\_.

The ESCs vary between the Megapack 1, Powerpack, and Powerwall. For the Megapack 1, the ESC is a \_\_\_\_\_\_, so Dr. Herniter's indirect and direct theories are: (1) communications from \_\_\_\_\_\_ (direct); and (2) communications from \_\_\_\_\_\_ (direct). Herniter Report ¶ 270. For the Powerpack, the ESC is a Pod, so Dr. Herniter's indirect and direct theories are: (1) communication from \_\_\_\_\_\_ (direct), id. ¶ 755; and (2) communication from \_\_\_\_\_\_\_ (direct), id. ¶ 753. For the Powerwall, the ESC is a PW2AC, so Dr. Herniter's indirect and direct theories are: (1) communication from \_\_\_\_\_\_\_ (direct) (direct), id. ¶ 753.

1	(indirect), $id$ . ¶¶ 1043–44; and (2) communication from
2	(direct), id. ¶¶ 1045–46.
3	Tesla argues that all six of these literal infringement opinions have already been disallowed
4	by the Court. Tesla Mot. at 18, 20–22. Unicorn responds by citing to portions of its operative
5	infringement contentions it claims to have disclosed each theory. Unicorn Opp. at 22–23.
6	Because, other than the nomenclature for an ESC and, the theories are the same for
7	each product, the Court analyzes the three indirect theories together, then the three direct theories
8	together.
9	i. Indirect Communication
10	The Court begins with the three indirect communication theories of literal infringement –
11	(Megapack 1), (Powerpack),
12	and Provided (Powerwall). As the Court discussed in its previous order, the
13	portion disallowed by Judge van Keulen
14	, which Tesla argued and Judge van
15	Keulen agreed was a newly disclosed theory." ECF No. 307 at 9; see also ECF No. 279-1 at 109-
16	10 (denying addition of communication theory for Megapack);
17	id. at 27-28 (denying addition of communication theory for Powerpack); id.
18	at 184-85 (denying addition of indirect communication theory for Powerwall).
19	Unicorn argues that despite these orders, its operative contentions disclose that the
20	can communicate with
21	directly and/or indirectly (
22	. Unicorn Opp. at 22 (citing ECF No. 279-1). Unicorn
23	argues that "the contentions disclose the theory of
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25	Unicorn Opp. at 22 (emphasis added).
26	The Court finds once again that this is an attempt to circumvent Judge van Keulen's order
27	denying Unicorn's motion to amend its infringement contentions.

This theory is otherwise no different from the

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indirect communications theory disallowed by Judge van Keulen.

Unicorn also argues that "Dr. Herniter raises triable issues regarding how the accused products satisfy the communication interface limitation," and points to paragraphs 58–74, 484– 668, and 755, (nearly 200 paragraphs over 90 pages), but does not explain how the report creates a genuine dispute of material fact. *Id.* Broad citations to evidence without explanation is alone grounds to grant summary judgment. See Traxcell, 15 F.4th at 1133.

Nonetheless, from what the Court has reviewed, Dr. Herniter's opinion on indirect communication is based on the disallowed theory whereby a . For example, Dr. Herniter opines, Herniter Report ¶ 65; id. ¶ 487 (same, and specifying that the """ There is no way to interpret the indirect communication described by Dr. Herniter as anything other than , a disallowed theory. ECF No. 307 at 9; ECF No. 279-1 at 109-10.

Thus, the Court finds that all three of Dr. Herniter's indirect communication opinions are based on undisclosed or disallowed theories, and thus do not create a genuine dispute of material fact regarding literal infringement of the Megapack 1, Powerpack, or Powerwall. Tesla's motion is granted on this issue.

#### ii. **Direct Communication**

Dr. Herniter's direct communication theory of literal infringement fares no better. As with indirect communication, the question once again is whether the evidence proffered by Unicorn is based on an undisclosed or disallowed theory.

Unicorn sought to add a direct communication theory to its Powerpack contentions. Judge van Keulen disallowed the following proposed amendment:

ECF No. 279-1 at 25 (emphasis added). Judge van Keulen found that these proposed additions
introduced a "new theory" that was "highly prejudicial." 11/7 Hearing Tr. At 63:3–64:11.
Now, Dr. Herniter opines:
Herniter Report ¶ 78 (emphasis added). According to Dr. Herniter's opinion,
. But this opinion spells out the
same theory Judge van Keulen previously disallowed, where
. ECF No. 279-1 at 25.
Unicorn contends instead that the theory was actually disclosed elsewhere in its
contentions. Unicorn Opp. at 22–23. Unicorn's infringement contentions disclose,
" ECF No. 279-1 at 25–26 (diagram labels omitted, emphasis added), 108–109.
But this contention only discloses communication .
As such, this passage in Unicorn's contentions does not disclose direct
•
Thus, the Court finds that all three of Dr. Herniter's direct communication opinions are based on disallowed theories, and Tesla's motion is granted on this issue.

### b. Doctrine of Equivalents

Tesla also challenges six doctrine of equivalents theories, two each for the Megapack 1, Powerpack, and Powerwall product classes. Tesla Mot. at 19–22.

The first three DOE opinions challenged by Tesla concern the Megapack 1, Powerpack, and Powerwall and have identical language except for the ESC used. Tesla Mot. at 18–19 (Megapack 1), 20 (Powerpack), 22 (Powerwall). For each accused product, Dr. Herniter opines that it (i) "performs the same function as the claimed communication interface because each [ESC] has at least one electrical contact for communication," (ii) "performs this function in the same way because information is communicated electronically by the [ESC] via an electrical contact, for example in a \_\_\_\_\_\_\_," and (iii) "achieves the same result because \_\_\_\_\_\_\_." Herniter Report ¶¶ 860–62 (Megapack opinion where the ESC is a pod); id. ¶¶ 762–64; (Powerpack opinion where the ESC is a pod); id. ¶¶ 1043–45 (Powerwall 2 AC opinion where the ESC is a PW2AC).

The fourth DOE opinion challenged by Tesla is that the Megapack 1 infringes under DOE because :

the above-described functionality of the Megapack 1 is at most insubstantially different from the claimed functionality and performs substantially the same function in substantially the same way to achieve substantially the same result and, therefore, infringes under the Doctrine of Equivalents for the same reasons that the First-Generation Powerpacks infringe, as discussed in Section X.A.1., incorporated here by reference

*Id.* ¶ 863, 765 (similar for Powerpack), 1063 (similar for Powerwall).

The fifth DOE opinion challenged by Tesla is that the Powerpack products infringe under DOE because "through "through "through " Id. ¶ 766–68.

Tesla argues that the first four DOE opinions are "broad and conclusory" and "fail[] to provide any purported equivalency for the 'for communicating with a further energy storing

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component of the supply network' portion of the limitation." Tesla Mot. at 19 (Megapack 1); id.
at 21 (Powerpack); id. at 22 (Powerwall). For the fifth DOE opinion, Tesla argues that the Court
denied both "Unicorn's request to add this same DOE theory to its contentions" and "Unicorn's
request to add a literal infringement contention based on the same underlying
indirect communications theory." Tesla Mot. at 21. For the sixth DOE opinion, Tesla argues
that the Court denied both "Unicorn's request to add this same DOE theory to its infringement
contentions" and "Unicorn's request to add a literal infringement contention based on the same
underlying indirect communications theory." Tesla Mot. at 22.
Regarding the first four DOE opinions, Unicorn responds that "Dr. Herniter adequately
opined that the 'electrical contacts' of the accused ESCs perform the same function as the claimed

opined that the 'electrical contacts' of the accused ESCs perform the same function as the claimed 'communication interface' because they each communicate information (e.g., and make it available to a further ESC." Unicorn Opp. at 23 (citing Herniter Report ¶ 860–862 (Megapack), 762–764 (Powerpack), 1053–1055 (Powerwall). Unicorn also argues that the "theories related to the 'communication interface' limitation are disclosed in its operative contentions at least on pages 32–34 (Powerpack), 113–115 (Megapack) and 190–191 (Powerwall)." *Id.* Regarding the fifth and sixth DOE opinions, Unicorn responds that the specific language opposed by Tesla "is not a DOE theory at all, but rather *evidence* supporting Unicorn's DOE theory." Unicorn Opp. at 23.

"Although infringement under the doctrine of equivalents is a question of fact, summary judgment is proper '[w]here the evidence is such that no reasonable jury could determine two elements to be equivalent." Akzo Nobel Coatings, Inc. v. Dow Chem. Co., 811 F.3d 1334, 1342 (Fed. Cir. 2016) (quoting Warner–Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 39 n.8). "A patentee must establish 'equivalency on a limitation-by-limitation basis' by 'particularized testimony and linking argument' as to the insubstantiality of the differences between the claimed invention and the accused device or process." Id. (quoting Texas Instruments Inc. v. Cypress Semiconductor Corp., 90 F.3d 1558, 1566 (Fed. Cir. 1996)). "Broad conclusory statements offered by [a party's] expert are not evidence and are not sufficient to establish a genuine issue of material fact." Telemac Cellular Corp. v. Topp Telecom, Inc., 247 F.3d 1316, 1329 (Fed. Cir.

2001); Finjan LLC v. SonicWall, Inc., 2021 WL 11961438, at \*6 (N.D. Cal. Mar. 17, 2021).

The Court begins by addressing the first three DOE opinions together. As an initial matter, it is not disputed that Unicorn did disclose electrical contact theories in its infringement contentions. Tesla Reply at 14; ECF No. 279-1 at 115 (Megapack 1), 33–34 (Powerpack), 190–91 (Powerwall 2 AC). But that is not the issue here. As Tesla notes, the first three DOE opinions say nothing about the equivalency of the "for communication with a further energy story component of the supply network" portion of the limitation. '869 patent; Tesla Reply at 14. As such, these DOE opinions lack particularized testimony and linking argument as to the insubstantiality of the differences between the '869 patent and the Megapack 1, Powerpack, and Powerwall. *Akzo Nobel Coatings*, 811 F.3d at 1342.

The Court turns to the fourth DOE opinion. Here, Dr. Herniter relies on discussion related to the "First-Generation Powerpacks." Herniter Report ¶ 863. But in doing so, he fails to establish any equivalency on a limitation-by-limitation basis with particularized testimony as to the insubstantiality of differences between the claimed invention and Megapack 1. *Akzo Nobel Coatings*, 811 F.3d at 1342. Furthermore, this DOE opinion is so broad and conclusory that it fails to establish any equivalency. *Telemac*, 247 F.3d at 1329; *Finjan*, 2021 WL 11961438, at \*6.

infringes under DOE because "

"through "

The Court turns to the fifth DOE opinion. Here, Dr. Herniter opines that the Powerpack

The Court turns to the sixth DOE opinion. Here, Dr. Herniter opines that the Powerwall infringes under DOE because there is "indirect communication" between Powerwalls ( ) in a multi-Powerwall installation. Herniter Report ¶¶ 1057–61. But the Court denied Unicorn's request to add this same DOE theory to its infringement contentions. ECF No. 279-1 at 189–91. Furthermore, as discussed above in the Indirect

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Communication section, the Court denied Unicorn's requ	lest to add a literal infringement
contention based on the same underlying	indirect communications
theory. <i>Id.</i> at 184–85.	

Thus, the Court concludes that none of the six DOE opinions challenged by Tesla presents a genuine dispute of fact as to whether the respective accused products practice the "communication interface" limitation of independent claims 1 and 27 of the '869 patent under the doctrine of equivalents. Accordingly, the Court grants Tesla's motion for summary judgment of no infringement on all six theories.

#### C. "Transport Interface" Limitation

The Court turns to Tesla's final argument, that all accused products do not practice the "transport interface" limitation. The asserted claims require a "transport interface for transporting the electrical energy to the further energy storing component." '869 Patent at Claims 1, 27. The Court did not construe the term "transport interface."

Tesla argues that the term is given its plain meaning to a person of ordinary skill at the time of invention. Tesla Mot. at 23. Tesla contends that Unicorn cannot prove that each of the accused products "could transport energy," which it contends is required under the term's plain and ordinary meaning because

. *Id.* Tesla additionally argues that the claim language and specification

. *Id*. at 24.

Unicorn argues that Tesla's definition improperly limits the full scope of the plain and ordinary meaning, and proposes a different claim interpretation, that "a person skilled in the art would interpret [the term] as a common connection between energy storage components." Unicorn Opp. at 24 (quoting Herniter Report ¶ 710); see ECF No. 405-14 (Herniter Dep.) 198:14– 24. Unicorn further argues that Tesla's argument "rewrites the claims to require a transport interface that can transfer the electrical energy into a further ESC, instead of an interface that can transport electrical energy to a further ESC." Unicorn Opp. at 24. Alternatively, Unicorn argues that "[i]t is undisputed that

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limitations"). As such, Tesla's motion for summary judgment on this issue is denied.

#### V. **ORDER**

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For the foregoing reasons, IT IS HEREBY ORDERED that:

- 1. Unicorn's motion for summary judgment on Tesla's invalidity defenses related to the SGSS is DENIED.
- 2. Unicorn's motion for summary judgment on Tesla's obviousness defense is GRANTED for all 17 of Tesla's obviousness combinations.
- 3. Unicorn's motion for summary judgment on Tesla's written description argument is GRANTED as to "contact unit" and DENIED as to "communication interface," "transport interface," and "energy storing component."
- 4. Unicorn's motion for summary judgment on Tesla's enablement argument is GRANTED as to "contact unit," "communication interface," and "transport interface," and DENIED as to "energy storing component."
- Unicorn's motion for summary judgment on Tesla's third affirmative defense asserting prosecution history estoppel is GRANTED.
- Unicorn's motion for summary judgment on Tesla's § 101 defense is GRANTED.
- 7. Unicorn's motion for summary judgment on Tesla's fourth and ninth affirmative defenses is DENIED AS MOOT.
- Tesla's motion for summary judgment on pre-suit damages is GRANTED. The Court finds that it is undisputed that Unicorn imported and did not mark two EnergyTubes that practice the asserted patent, and finds that Unicorn is not entitled to damages prior to October 26, 2020, when it gave Tesla actual notice by filing the complaint.
- Tesla's motion for summary judgment of non-infringement of the "gateway," "switch," and "communication interface" limitations by the Megapack 1 both literally and under the doctrine of equivalents is GRANTED.
- 10. Tesla's motion for summary judgment of non-infringement of the "communication interface" limitation by the Megapack 2, Powerpacks 1, 1.5, 2, and 2.5, and Powerwall 2 AC both literally and under the doctrine of equivalents is GRANTED.

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11. Tesla's motion for summary judgment of non-infringement of the "t	transport interface
limitation by all products is DENIED.	

Dated: May 24, 2024

BETH LABSON FREEMAN United States District Judge